

Multidimensional Multichannel Multi- “Distinguish” Dynamic Map in Dynamic Nodal Media

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Abstract—This paper analyzes multidimensional multilevel dynamic map, consisting of connected and disconnected bidirectional and/or reversible nodes, and its relation with similar dynamic maps. These nodes can be deterministic, fluctuating and can be random with chaotic motion. The problem to solve is how to communicate (-relate) among these nodes of the multilevel dynamic map in the Euniversal map, such that variable internodal connections between two (or 2 sets of) arbitrary distant traffic nodes are maintained. Such nodal analysis is based on the theoretical pattern research, by this author in 1979, of mobile one dimensional phased array samples.

The analytical study is useful in the generation of no sidelobe patterns, author proposed media continuity communication, author proposed signal pull, fetch and suck systems, parent selection in Boolean algebra process genetics, siblings match, and point synthesis of invisible compounds by Etomic and molecular filter.

1. INTRODUCTION

This paper analyzes the multidimensional dynamic map for multidimensional media and/or data resolution (known resolution methods are described in [1,2]), such that linkage among connected and disconnected nodes is possible for nodal map communication, media continuity communication, gene identification, subsequent parent selection, sibling match (during one's life-time), reversible bi-directional visible or invisible body growth and decay (in terms of needy, process apply e.g., in rain-contract [3]), forward birth or backward reverse miscarriage for another parent selection in survivable network (-map) in the universe. The universe is assumed to contain several dynamic maps, one of which is the opposite of the dynamic map in the Euniversal map. The mathematical description of a dynamic map is described in [e.g., 4] via discrete matrix state equations and corresponding multi-step dynamic equations. The coefficients of this matrix contain features as color fades in the spectrum, relational correlation (as in media) and genetically dependent geographic traffic rules.

The problem to resolve is to estimate each coefficient of this map matrix exactly to classify each matrix variable by certain criterion (e.g., fractions, K. Gupta, 1989; Emistical real or integer numbers) to determine who gave the idea. An optimal map is defined in terms of connections among some points (as super high resolved beams) in an area with traffic like rules, such that weather and/or genetic patterns anomaly (-variations) can be researched from the optimal estimate. A process graph is defined in terms of GAMA dynamics for anomaly reduction in a specific area as geographic coasts line and in a body. Euniversal map is a process graph in both visible and invisible worlds for exact nodal

determination. The problem thus can be stated as the identification of the life idea person point (someone' else point of view or self-directed) in the universe and track of dynamic operation (-mod K life-cycle model) in an organization. Subsequent rebirth (-reincarnation as fertilized growth in genetics) in another similar organization results in mod L (model) multilevel body growth and decay. These mod K and mod L models anomaly, to match previous and current life track, can be analyzed by multilevel multidimensional data transfer map connections as mod M (modem) filter. Any residual anomaly and adaptivity of the point, in terms of its exactness and fluctuations, is a topic of future, as in bidirectional future life, investigation. It can be noted [5] that phased array analysis is the same as the sampled front analysis of the arrived wave or multidimensional signal, such that phased array elements can be artificially generated and are not necessary in direction dependent signal resolution. Therefore, the graphic analysis results in better understanding of the bidirectional multidimensional filter and the corresponding dynamic map.

In a media continuity communication, e.g. meteor shower communication, an area may consist of direction (-four sides as neighbors; left-tell, right-travel, upward and downward directions; center as map origin, also J. Gupta, 1990's) dependent non-overlap duty cycle trails; such that continuous area coverage results in continuous communication graph. Such continuity in the area coverage can be analyzed by the noisy (or nonoise) fat-phased array points or as the sum of many multipoint patterns. In the known Kalman filter estimation by Fraser and Potter (1969), optimal estimation at an interior point in an interval is the average of the realizable estimate from the past and present data, and the realizable estimate from the present and the future data. Such estimation method assumes the realizable digital filter model of the noisy data (implies known signal estimation in white noise) and it is not an unrealizable estimate. Therefore it is not necessarily an optimal estimate. Comparative analysis of Fraser and Potter's Backward-Forward estimation technique with that of author-proposed unrealizable optimal filter approximations as two-sided Gweiner filter is a topic of further graphic computational research. The author proposed GARMA filter estimates noisy data point based on past, present and future (A. K. Gupta 1980's and 1/25/1995; Kalyug-future, K. Gupta, 1982; also interpretation in terms of relocation, J. Gupta 9/1996) data and is optimum under a variety of conditions including media-transformed random signals and nonwhite noise. A process graph for point estimation from its input-output neighbor points (as in GARMA filter, however, without the use of optimal theory) is described in [5]. This graph is useful in analyzing known nuclear survivable flexible networks for network reconfiguration. Application of multidimensional GARMA filter to the topic of missing data points in data point estimation is a topic of continued

investigation, utilizing data feedback pole-zero models rather than known extrapolation and intrapolation techniques in time-domain and in phased array. This multidimensional graphic points analysis with inclusion of missing points is also useful in network reconfiguration and map reformulation. The matrix formulation of this graph for the Emistical map in terms of rotational matrix coefficients is analyzed in [e.g., 4]. This author applied, in 1990's, matrix analysis of multidimensional super high resolved system in nodal map communication in terms of multilevel nodes and interconnections. The difference between map and networks is described in this paper in detail. The known communication networks are: (1) telephone switching circuits, (2) telemetry in satellites, (3) communication to aeroplanes and ships etc. (4) neural networks, (5) local area hand-held telephones, (6) local area computer networks, (7) survivable network. This author published sound transmission and fetch at an arbitrary distance, in 1988, without the use of known hand-held phones, and proposed [e.g., 4] sound transmission probe and mind snoop system by satellite and media as HF, troposcatter communications in 1991. Application of serious remote topic (J. Gupta, e.g. 10/30/1996) in a known hand-held wireless local phone network is of continued research. Based on personal imaginative sound experiences in 80's and 90's, transfer of data in an Euniversal map, as word "Ding Dong" (5/1998) in a dream, can be termed "Ding Dong" communication.

The analysis of this paper has applications in spy system to fetch sounds at arbitrary distances, sound transmission communication via probe, super high speed cables and no loss cables, color transmission in media, body parts mean, solo fly and car plane (9/1996) on a grid, genetic map communication, body dynamics and its chip resolution, body graph, dynamic language, letters and word mean in a sentence and in a paragraph etc. and corresponding data compactness on a process graph. A paper is in preparation on data model by chips and process data compaction by the dynamic nodal filter.

2. AN EXAMPLE

In an Euniversal link [e.g., 5], stochastic and/or dynamic data is transmitted through stochastic and/or dynamic media, and randomly distorted noisy dynamic and/or stochastic data is received. Received data is processed to estimate the transmitted data at a required probability of error performance criterion. Although in a known 2-way communication link, data contents differ at each end, if the estimated data is retransmitted in the same or identical media, the data will again be noisy and more distorted. Receiver processing is again required for almost perfect match. Alternately, before retransmission, if data is operated (e.g. convolution) by the inverse of the media characteristics (e.g., spectrum), such that receiver (original transmitter) receives the estimated data, which may be almost same as the original transmitted data. If however, forward and backward media differ substantially, then the close-loop 2-way communication link requires media probing both ways. Furthermore, if the estimated data differs from the transmitted data beyond a specified criterion, retransmission will result in increased noisy and distorted data at the original transmitter. Therefore alternate route or routes (and

techniques) are required for retransmission to the original transmitter. These routes are assumed to be less randomly distorted, such that cascaded retransmission will result in less distortion in the data at the original transmitter. This paper deals with this 2-way Euniversal communication link scenario. A general link involves group links, in which individual links in an area are connected with the links in another area, directly and/or via routes.

In such a close-loop system, data and/or media can be analyzed by the nodal map, such that nodes are asynchronous, in motion, overlapped, multilevel, distorted, similar, grouped, identical, noisy, fluctuating, points, unequal spaced, functional (-e.g., fat or skinny, work or research), mirror (-e.g. for mass nodes, left side is right), multidimensional, visible, invisible etc. Nodes can transform from one domain to another (e.g., from frequency-listen to phase-face). Nodes can also be like a switch and opposite (if a node toggle between 0, 1,?; there is an opposite node 1, 0,?). The connections between nodes can be continuous, intermittent, disconnected, multi-colored tunnels (e.g., black hole between 2 sets of nodes; solar system and outer world), multimedia with path losses, gains, amplification, growth, linear, nonlinear, slope, bi-directional, irreversible, dynamic etc.

Such scenario also occur in real-life situations, where an outplaced individual from a company apply to the same company (may be at another location immediately or at a later date to any location, rather than company initiated transfer) or to the similar companies at a lower level (with exceptions at a higher) or at a same level. The possibility exists for this individual to be recalled or be accepted at the same company or to obtain a job at another or other companies. However in cases of an individual proposer of an idea, the companies reorganize to add or subtract the proposer as in the NewClear domino game [3], such that chaos occurs in one company or in cluster of companies. In the mirror, a company organizes in the opposite direction to subtract or add this proposer. The problem to analyze then is how to connect this company with the previous company in the presence of the cluster (either as buffer and/or interference), to determine who has the idea certification and to resolve who gave the idea. It is quite possible that the outplaced individual has the idea.

For this example of apply again and again by the outplaced individual in one or many companies as nodes, location dependent nodes (in different professions) can adopt the individual as specific, another or other. This may result in nodes motion in different directions (upward, sideways etc.), such that cluster of nodes may be coherent, asynchronous, chaotic, dynamic etc. Due to this external input, nodes may reorganize, subtract or absorb the individual and/or group of similar individuals. In the absence of the external input, nodes may also reorganize due to connections with other group of nodes. Therefore the problem defined in [Appendix 3, 3] is how to streamline the mirror of the previous company orderly through a process via certain skip laws, such that nodes in the Euniversal link are stabilized. Laws to govern universal nodal redistribution are also discussed in this reference.

Euniversal close-loop link has applications in genetics. In genetics, the inhabitants in nodal earth are visible and in the outer nodal world are invisible. This model is close-loop in the sense that invisible spirit migrates to gene (a node) to visible baby, and then from baby growth to growth limit to body decay, and subsequently to spirit immigration into multi-life situations. The loop ensures the input spirit to the visible world matches with the output spirit within a specified criterion for ultimate perfect match in the determination of who has the life idea.

In all cases, the problem is simplified by analyzing one-way communication link, consisting of transmitter, media and receiver, in terms of map data transmission through map media for identical match of received data map with the transmitted data map. In the communication problem, the problem to solve is to establish communication among connected and disconnected nodes in the universe. In the genetic applications, nodes in the visible and invisible worlds are streamlined to resolve the crowd to determine who gave the idea. With this analysis, variable limit super high speed data transfer can also be achieved in the applications listed in Section 1. In Section 3, we summarize previously known resolution (e.g. Raleigh) and superresolution (as wavelets, linear prediction) techniques and author proposed super high resolution systems after mid 80's and multidimensional systems in 1991. In this section, we also state Emistical and process resolution methods to determine who gave the "life" idea. Such determination requires super high resolved multidimensional multilevel coded process graph with map connections. In Section 4, we provide multidimensional media as the basis to develop the multilevel process graph. In Section 5, we summarize map conception and its developments in 1990's to obtain continuous media map, with applications to dynamic data and nodal synthesis. The known phased array analysis, author proposed super high resolved beams and beam dynamics are useful in the synthesis of multidimensional dynamic map.

3. "DISTINGUISH" SYSTEMS

This section's purpose is two fold: First we review literature in terms of resolution techniques in one or more domains, and summarize author proposed resolution ("distinguish") techniques in multidimensions. Second, we mention author proposed (1979) media continuity communication useful in author proposed continuous equalized communication in intermittent meteor trails by, e.g. transmitting through channels in different directions in a given area. Intermittency is caused (also J. Gupta, 2/6/2001) by the proposer sun at the other wall! and subsequent proposer again at another neighbor wall! Such continuous capture feasibility of variable strength discontinuous (-disconnected) meteor trails as multiple variable nodal chips, if possible, will result in continuous returns. M. D. Grossi in 1980 said this concept's usefulness in parked car counts outside a building by satellite. Previously known resolution techniques are: Lord Raleigh's exponential waves resolution, Fourier spectrum domain sinusoids, time domain orthogonal functions, close sphere pack problem in capacity calculations, Butler matrix based overlap beams, North's signal/noise discrimination, phased array directional

interference null, Baghdady's induced Doppler frequency modulation method (IDFM) and geometric dilution of precision (GDOP) performance criterion, wavelet superresolution in image processing, Gabriel's superresolution direction nulling. We classify in this paper, in terms of signal processing based resolution methods, previously known techniques in two related areas as: (a) coherent eye lens correction, estimator-subtractor detection for known vector signals in colored noise, PLL, frequency lock loop, sinusoid tones comb digital filter resolution, two sinusoids discrimination in white noise by ARMA model, multiple noisy sinusoids enhancements by linear prediction, long code sequence resolution in multiuser communication. (b) iterative noncoherent angular superresolution in 1988 by post-detection signal processing of the aperture-limited signal in noncoherent scanning or imaging sensors e.g. IR sensors or noncoherent radar, pixel enlargement in image processing. Note that resolution methods can also be sub classified as no additive noise resolution techniques, resolution improvements in noiseless and noisy situations. This author's previously proposed techniques on resolution topic are: mobile phased array element analysis for IDFM resolution limit by approaching light speed phased array sample rate in 1979, ARMA model use in linear phased array space elements for specified interference rejection in earth station in 1981, integrated communication in 1982, space-time ARMA model and filter implementation structures for arbitrary interference rejection including multitone enhancement or suppression in 1984, GARMA tonal equalization systems in 1985, super high resolution in 1986 by generalized vector signal detection with arbitrary statistics, super high resolution spatial detection with complex coefficients applicable in arbitrary shape arrays as circular in 1986 (analyzed in 1989), super data rate communication possibility in 1988 by author proposed tonal temporal GARMA filter (-high resolution), generation of no overlap finite element beams in 1990, multidimensional multichannel coded and modulated beams representation and generation in 1990, front-end multidimensional modulation reception in 1991, transfer of the techniques of one dimension to another dimension for novel multichannel multidimensional detection theory in 1991, multi-resolution (multi- means variable resolution from low to pickup including infinite resolution) in 1990's.

For super high resolved meteor communication, multidirectional beams should not overlap. The topic of generating orthogonal beams was not explored much in the literature before 90's. One of the previous methods utilized the fact that infinite length array causes impulsive beams by shrinking ($\sin Ax/Ax$) individual element patterns in an element array. In this method, an interference source between two contiguous beams and/or in main lobe regions is almost impossible to be pulled, because of auxiliary beams location. A common method utilized in 80's was Butler matrix. A Butler matrix essentially sets up a spatial discrete Fourier transform in which the transformation vector for linear array with equal element spacing has individual weights dependent on beam index, element index, element spacing, # of elements, and vernier beam adjustment angle. The number of beams will be almost the number of sources in the field of view. These beamformer are easy to implement and offer fast performance in beam

computations. However, the resolution provided by the beams generated by using the FFT is limited because there are only Q fixed beams available from a Q element array and the separation between contiguous FFT beams is based on the use of discrete phase values. If an interference source appears between two contiguous beams, the adaptive performance of the array will be degraded because these two auxiliary beams cannot produce a null towards the interferer. Another problem arises when an interference signal occurs in the main beam region. It is almost impossible to conceal unwanted signal since the nearest auxiliary beam is away from the interferer by at least the beam separation. Alternative to forming auxiliary beams is to use the beams associated with the signal eigen-vectors of the sample covariance matrix R , known as eigen-beams. However, this known method in late 80's performs well if the desired signal is not present or is much weaker than interference signals. In known post-detection processing, termed superresolution (rather than known another signal approach, a crude approximate monopulse resolution), the detected signal is modeled as the desired high-resolution equivalent signal degraded by convolution with antenna pattern or point-spread function of the physical sensor. The resolution is then known to increase by deconvolving the real-aperture data. This method of deconvolution or inverse filtering (Mark A. Richards, Iterative Noncoherent Angular Superresolution, 1988 IEEE National Radar Conference, pp 100-105) improves effective angular resolution by 3 to 8 times. A general multidimensional equalization technique is however required for arbitrary environments (-signal, media and reception conditions) including for coherent signals/signal. Author proposed vector spatial detection generates non-overlapping beams for arbitrary signal, media and noise characteristics with area coverage dependent resolution (means variable-resolution). On 3/20/1990, this author compared known midband cluster of nine beams formed by Butler matrix interferometer beam former, steered to center position of 42 degree azimuth; with super high resolved 2nd order Gcomb space filters. Variable process resolution [3] can be high-resolution in time-frequency plane in an array, super high resolution in space-time-frequency plane, multidimensional resolution in time/frequency/ space/ phase/ codes functional domains and corresponding multichannel transformations, resolution in specified multidimensional area or in large area or in cascaded areas depending upon the variable chip input resolved (input classification as pulse, white noise probe) graph, low resolution, no resolution, intermittent resolution, ultimate resolution, multi-input resolution, real and imaginary distinction for complex inputs. Comparison of various process resolution techniques, including Emistical pick up resolution [3], in terms of degradation by the interfered media and corresponding equalization is a topic of further research, since finite-time interval, various inputs and listen multilevel dynamics can cause overlapping.

Current systems in 80's utilized spatial FFT, which essentially implement Butler matrix to generate orthogonal beams. These methods, however, produce sidelobes. Although shading (a signal processing technique, windowing utilized in spread-spectrum correlation sidelobe minimization in late 70's) can be used to minimize these sidelobes, novel techniques were to be designed in 1989.

This area was not pursued until late 80's, when extrapolation and intraposition techniques were utilized to minimize sidelobes. This technique improves resolution by synthesizing data points up to three times the number of real sensors, because resolution is proportional to the inverse of array length. In 1/31/1990 report, titled "Novel Super High Resolution Spatial Detection," this author analyzed and implemented novel spatial filters [3], which had no sidelobes and had super high resolution with finite number of sensors. The accommodation of faulty sensors by utilizing possibly improved intraposition techniques were suggested for further advances. The novel and state-of-the-art proposed emphasis was on developing spatial filters (such as causal and noncausal GARMA filters) such as to minimize sidelobes and improve resolution, and to show that the currently investigated extrapolation/ intraposition technique is a special case of the proposed spatial filters. In 2000 IEEE Information Theory Symposium, Italy, missing data points ARMA model was investigated in time-domain.

In summary, resolution is defined, in general, in this paper as multichannel signal detection in colored noise through the multichannel stochastic multi-media. "Distinguish", however is defined in terms of multidimensional multisignals (-nodes) resolution in chaotic environment in the presence of deterministic and ripple interference (sun proposer at arrival in nondynamic or dynamic company network model) to differentiate between dynamic signal (resulting in subsequent company organization) and interference (as topics nodes or as sun proposal). These nondynamic and dynamic nodes can be distinguished to determine; e.g. which nodes research (affecting weather pattern) or which nodes work (have who gave the dynamic life idea). A dynamic node that goes downward (-self outplaced backward), to select subsequent window in the presence of strong threat, has the lie (-self adjustment to shelter as welfare, K. Gupta, 5/1989) idea (J. Gupta [3]) in the sense of life. Distinguish differs from "distinguish" by the inclusion of certain multidimensional visible or invisible nodes as uncoded multidimensional colored noise. Such inclusion results in nodes overlap, e.g. one dimensional signal and interference arrival from the same direction. Thus alternative technique of multidimensional no overlap nodal resolution is needed.

4. MULTILEVEL MULTIDIMENSIONAL BEAM CHARACTERIZATION FOR STOCHASTIC MEDIA

Progress in Stochastic Models:

A stochastic media as TV, radio, print, body media, consists of a specular, deterministic, quasi-random, random components in addition to its instantly, timely, daily, weekly, monthly, bimonthly, yearly variations. These variations and its corresponding multi-step dynamics in local, metro, state, country, world and universe result from variable interactions among individuals (including names of animals, as fish, mean [3], creatures but absence of sound data transfer connection from brain to mouth). These past, present and future dependent instant by instant (defined in terms of impulse, gated time, feedback time, dynamic time) variable relations represent system dynamics. Therefore the absence of any interaction among interconnected living

creations (as points on a universal map) results in a disconnected random media with no dynamics (termed residual dynamics). On the other hand, all the living beings perfectly synchronized in the absence of an unsynchronized individual cause chaotic media. Therefore, the problem to solve is to streamline chaos as to determine who gave the "life" (- subsequent window! selection or window selection by Right) idea. Multilevel multichannel super high resolved process graph solves this problem with certain process laws, Emistical map, node connections, and curved bidirectional steps [3]. A method to calculate graphically the dynamic media process steps, including media as lie (-life) sense idea person detector, is yet to be researched. For Emistical multilevel multidimensional map, the transmission delay (-steps) through the curved tube can be obtained by the process step determination methods (-delay estimation techniques from the process graph, J. Gupta 4/10/2001). A possible technique for this method can be obtained by relating the transformed (as Hilbert transform) signal with the delayed transformed signal via real and imaginary components. In the Fourier transformed phase spectrum, the delay is obtained from the phase slope. In a three point rising curved graph (e.g., YO media listen), the delay (positive or opposite negative) can be estimated from the edge points or from the center and its adjacent point (causal estimation) or from 3 or more points straight line (noncausal estimation). The delay can be a phase delay, if computed from the two points (local delay between adjacent points or far delay from far points) or it can be a group delay, if computed from the multipoints. The local delay can be defined in terms of policy delay and the far delay is useful in determining parent selection and in distinguishing parent from the local delay. Similarly, process forward (-downward slope) delay and process backward (-upward) delay from the center can be defined. Many known methods, for the purpose of determining the arterial transmission velocity, as pulse wave velocity (the so called "foot-to-foot" velocity, based on the earliest indication of the beginnings of the respective pulses), apparent phase velocity, true phase velocity and correlation propagation velocity can be utilized to define the corresponding delays. History of delay fluctuations can be summarized as known slowly varying amplitude and phase target return signal, and approximations to known signal/ known EKG epoch jitter/ delay fluctuation model in BP system in 1973/ summary of known meteorological anomaly effects in specified satellite to ground range calculations in 1976/ known frequency diversity for meteorscatter propagation multipath mitigation in 1977/ anisotropic scattering based random atmospheric model in 1978/ random amplitude and phase models in random media in 1980-81/ methods as equalization to counter delay variations in 1980's/ ionospheric electron content based range delay model in 1981/ chip equalization/ multidimensional delays in 1991/ dynamic delay and streamline since 1992. Phase spectrum fluctuations, resulting in delay fluctuations from 2 deterministic BP signals are different than target return signal variations. Material diffusion [e.g. 6] is one possible reason for input-output signal mismatch. The generalized media analysis via transfer function and/or data, and corresponding Euniversal map is described in [3]. Such analysis (including with process input dependent delays as organization delays due to the arrival of a high level or subsequent multilevel

person, 1/5/2001) is also beneficial in maximum data rate transfer by streamlining fluctuating, random, disconnected, noisy, interfered nodes and identifying their directional, horizontal, vertical, rotational, fluctuate interactions.

The multidimensional stochastic media consists of deterministic, fluctuate and ripple components as a result of people's upward-downward and sideways motion, multidimensional network traffic, geographical changes, social relational map etc. Such movements affect instant weather patterns (e.g. hurricane speed of 60 miles/hr, J. Gupta, 10/6/1995, cause tree branches to fall; storm defined as Imergency policy, K. Gupta 1989) and geographic phenomenon as plate tectonics and Earthquake (earthquake - earthquake in Bhuj, spells BhUJ, India on 26th January 2001 was process location dependent shake). Emistical snow (-media forward proposer or subsequent business apply), snow storm (-media forward needy proposer or subsequent business policy), rain water (-media forward contract or subsequent work assignment) can be explained by body heat dynamics [3] (body cold-body outplaced, subsequent window selection due to high - kid-life sense body; K. Gupta 1989 spring, also opposite body heat fever-listen subtraction in the universe in 90's). The reason of 7 colors rainbow appearance in the sky (-subsequent bow downward rather than rain window upper) is a topic of experimental research. Theoretical research continues on these explanations in terms of GAMA dynamics in the universe. "Eingbang" model for the reason of sun outplacement to the solar system is described in [3]. Thus media can be described in terms of vector input-output system matrix, via flexible variable connection multilevel network with disconnected nodes. Such traffic network is bi-directional, and has multi-lanes reversible and irreversible traffic rules as stop sign, speed limits, left or right blinkers, merging, horn etc. Therefore multidimensional media and/or data can be analyzed in terms of mobile points graph in motion (-dynamic map).

Multi-domain random media impulse response can be obtained by arbitrary shape molecular map points, similar to compound synthesis by the molecular structures with atomic sub area points, consisting of electrons, protons etc. (Appendix B). A device to convert multidimensional coded received signal (noisy deterministic and/or random components) to electron signals as nonlinear map for single or diversity received signal enhancement is yet to be researched. A possible technique is to streamline electrons by known molecular beam techniques, similar to combing curly hairs (-streamlining). One possible application of this response is in the linearization of the logarithmic capacity function, by using alternate to known envelope power calculation. The possibility of analyzing gas molecules in motion rather than sphere pack molecules (as nodes) for linearization is yet to be researched in terms of gas pedal (as in car, car as subsequent business body parts means, K. Gupta 2/1992 and beyond) dependent process multi-gear car speed and corresponding M/M/1 of arrival size 2 motion dynamics. Emap speed limit can be achieved from the Emistical interconnected map equation; Guess what m or Mj? M-c square equals E [E. Gupta, 5/24/92]. A paper is in preparation for the detailed analysis of this overlap nodes map for nodal streamline It can be shown that $E_{map} < =$

Emax [3]. Speed power can be obtained from the high-growth step [3]; P is equal to MC. It is shown in [4] that sphere pack is a step of multistep dynamics. Therefore, the effect of multistep dynamics on speed limit results in variable speed limits. The problem of estimating deterministic sine wave exactly from the distorted narrowband Gaussian signal (such as scattering signal) in speed limit determination thus can be solved by identifying individual beams and connections. It has applications in listening the sounds in various locations in the body, sound propagation in the stochastic media as underwater, atmosphere and corresponding media equalization. It is also applicable in known speech transmission (and listening) through acoustic tube, in terms of pulse propagation through cardiovascular system. In general a stochastic media consists of deterministic and variable anisotropic random components. Data, however, has time-varying windowed information contents; which may be deterministic, but in general is fluctuating and random. The difference in data and media model analysis is important in maximum data rate transfer. Transfer function represents backward (-transfer outward; K. Gupta, fall 1991) dynamic motion for ensuring 'Policy has the idea' in data dependent chaotic environment. This backward movement can be defined by backward operation in terms of the window as policy selection in the presence of original proposer in the outer Euniverse and business planner in the inner universe. The forward operation is defined in terms of subsequent window selection in the presence of original proposer in the inner universe and business planners in the outer universe. The mismatch between the forward and backward operations results in; who has the life idea environment, weather patterns, bi-directional media dynamics, genetic map and modK game. In conclusion, the data characterization and media representation by process cause and effect input-output (reversible process effect and cause by output to input) system can streamline the Eupta Euniversal map function for who gave the idea determination.

Known inverse scattering in deterministic component synthesis requires knowledge of reflection and/or transmission coefficients (e.g. scattering matrix) in electromagnetic propagation. Thus field wave equations can be researched in terms of multidimensional transfer function (including for white noise transmission) rather than the field propagation (whether be deterministic and/or random). Therefore ray tracing digital field equations (-digitized and/or quantized network) can be rederived in terms of optimal wave and filter equations, possibly via known scattering transfer function. For example, field calculations for aperture (-circle of 40) illumination can be packed (as pencil beams in sphere packing) by multidimensional super high resolution filter beams, rather than in terms of linear array. The resulting media (such as vacuum) can be articulated in terms of an open heart sit bear with 9 colored ballons in the left hand [E. Gupta, 2/27/94] problem. The colors are 2 greens, 1 blue, 1 orange, 1 brown, 2 dark purple, 1 light purple, 1 red [for the significance of the colors, see [3]]. The meanings of color codes are [E. Gupta, February 8 and 15, 1993]: Green-Jealous, Yellow-Bright and helpful, Blue-Sad (because of fighting among friends), Purple-royalty, Red-Heart beating, Pink-sweet (color of bubble gum), Orange-Happy and proud. This bear

symbolizes the possibility of media split in deterministic and ripple components [e.g. 6]. In 1988, this author analyzed random media effects by the interference-cluttered multichannel antenna system in real-time by computing the number of chips required for deterministic channel and for random channel [3]. The detection of a signal transmitted through a random media in white noise is known to be the dual to the detection of a signal in colored noise. The known performance measure of such a detector is termed d^{*2} , defined as the ratio of the square of expected value and the variance. This author in 1983 proposed this measure to analyze the effect of transmission media on the PN signal. Closed form solutions of d^{*2} can be obtained for the communication channel as a finite state filter (and for the nonrational spectrum in the 90's [7]). If the transmission media is deterministic, the author developed general processing gain formula can analyze the effect of multipath with time-independent attenuation. Another application of this analysis is to quantify the dispersive effect of whitening filters on the processing gain and dispersiveness caused by the time-adaptive characteristics of these filters. Rather than known receiver processing techniques (as RAKE correlator, DFE, maximum likelihood chip estimation) for PN signals transmitted through a time-dispersive channel, this author proposed code diversity as the combined transmitter-receiver processing techniques. Since PN signal employs frequency diversity by virtue of spectral spreading, loss of certain fraction of spectral density (to counteract random media) was considered as the compensation. This fraction can be computed from the ' d^{*2} ' performance index criterion. This technique appeared to be more practical than the previously considered techniques.

Known Randomly Time-varying Medium [8, 9, 10, 11]:

Propagation equations in optics, radio etc. are represented by Maxwell's partial differential equations. Cable is modeled as known polezero transfer function. Deterministic media model is utilized in media distortion analysis. Additional popular media models are: tapped delay-line model, tapped delay line model with all pole taps derived from scattering function by simulating a random process at each tap, and continuous target return random process model by doubly spreading space-time state variables for white noise probe. However, as described before [e.g. 4], this model is different than that of author synthesized (in 1978) spectral density based polezero model for white noise probe and for cw input. In short, previous models are [8,9,10,11]: Rician statistical model, propagation and wave anisotropic scattering, refractive index dependent phase correlation at optical and radio frequencies, modulation distortion calculation from electric circuits simulation, deterministic model, amplitude spectral density at radio frequencies, WSSUS exponential and Gaussian correlation, doubly spread channel simulation by state variables, partial differential equations model, multilayer atmospheric model. In addition, the models are popular in other areas as: fluid flow in arteries model by Reynold number dependent partial differential equations and corresponding analog model via difference-difference method, deterministic cardiovascular model simulation on a hybrid computer for gated input with nonlinear capacitance (and with a pressure-volume curve for ventricular-atrium leakage correction in blue baby's cardiovascular system model); data models as

nonlinear prediction, complex exponentials for EKG for impulse input, ARMA model applications with white noise random input, noisy sine wave ARMA models (e.g., in adaptive array in 1982), M-ary taps in delay line model; models in physics etc.. The media models can be process represented in terms of Maxwell's field equations with exponential inputs/ random motion as particle motion differential equation with white noise input/ anisotropic media as wave scattering/ phase correlation/ deterministic model as tapped delay line model in 50's/ WSSUS characterization in 60's/ doubly spread models in 60's/ analog circuit model for a fluid flow partial differential equations based system in 60's/ digitization of propagation partial differential equations by digital state variables in 1973 by this author/ media synthesis in 1978 by the author. Impulse response using digital ray tracing in meteorscatter system in 1977 and wavescatter rays additions in communications and in antennas (late 70's) are also reported in the literature.

Developments in 70's and beyond:

This author's contributions in 70's in media description were— modified electric circuits model based on the known cardiovascular fluid flow model simulation by cascaded circuits and on the known transmission line circuit model in 60's, application of known pulse input waveguide distortion analysis, pulse propagation (-travel) through the propagation parameter dependent modified cardiovascular model in 1973, digitization of Maxwell's equations by digital state variables, model extraction from 1 BP signal (amplitude and phase spectrum) and lossy delay line synthesis (note that differential equations are lossy lines) from 2 BP signals, data input model parameter adaptivity in delay estimation, input-output waveform match based on known maximum input-output correlation coefficient as minimum mean-square energy criterion, data adaptive input-output transfer function from 2 BP signals, delay fluctuations in phase spectrum based delay estimation (delay estimation by correlation is specified), identification of amplitude spectrum fluctuations effect problem in phase spectrum in 1973; analysis of satellite to ground range (via delay) correction by the presence or absence of the fluctuating media slab in 1976; novel spectral moments based troposcatter antenna alignment for known spectral symmetry dependent (specified analog crosscorrelation and its variance formula, specified one or both hard-clipping of components, and known phased array antenna alignment literature) alignment in 1977, digital montecarlo adaptive simulation of novel inverse decorrelation filter to uncorrelate correlated inphase and quadrature components of a complex Gaussian statistics to test new antenna alignment in 1978, media parameter dependent known anisotropic spectral density synthesis by multi-tap or continuous pole zero model for random media channel (e.g., troposphere, ionosphere, underwater) for white noise input or cw input in 1978, link synthesis including antenna pattern synthesis and media drift model in 1978, time-domain amplitude and phase split in received incoherent complex envelope, feasibility of exact time-domain transfer function from nonrational tropospheric anisotropic spectral density in fall of 1978; mobile grid pattern synthesis in 1979, media as an oscillator in 1979, pole zero models for oscillator drift from known drift correlation function in 1979. A faculty at

Indian Institute of Technology Kanpur supervised the dual-frequency ultrastable oscillator design check for Mossbauer spectrum in 1971. This author researched the problem of the amplitude fluctuation effects on phase slope for specified delay estimation in 1973. In determination of the amplitude fluctuation effects on phase slope in a cardiovascular system, amplitude and phase spectrum relation in linear system is well known. AM to PM conversion in nonlinear devices is well known. This author simulated asymmetric cross- and auto- spectral density for troposcatter channel in 1979 [12]. The linear prediction filter for amplitude-phase spectrum relation was investigated in 1979-80 in speech processing from zero crossing correlations. Multidimensional stochastic matrix interactions among various domains as time-domain amplitude and phase are analyzed in [6] with application to deterministic arterial propagation fluctuation model. The feasibility to extract propagation fluctuation independent delay from phase spectrum is yet to be researched.

In the 1980's, this author's contributions were— propagation parameter dependent underwater channel model, transfer function dependent range error correction in satellite to ground range channel in 1981, electron density dependent pole zero model from known ionospheric spectral density and refractive index dependent pole zero phase model for tropospheric range channel in 1982, amplitude and phase spectral density synthesized pole zero model for satellite to ground range channel and for general random channel in 1982, reformulation of known linear prediction multisinusoids suppression in spread-spectrum data (and in adaptive array systems) to the interference rejection problem by deterministic ARMA model and corresponding detection theory based optimal GARMA filter (applicable to equalization systems) in 1982, impulse correlation synthesis for spread-spectrum signal as white noise by two-sided delay line, lattice model and corresponding two-sided convolution and lattice codes in 1982 [e.g. 4], General processing gain formula for media distorted reception in 1982; binary asymmetric channel based precision antenna alignment in 1982, multi-institutions relations as PLL in 1983; spread-spectrum synthesis proposal in terms of flat spectrum in 1983 (applicable in media modification, 11/17/2001); thoughts communication since 1984; arbitrary distortion and/or noise control in error minimization (minimization of known sum of distortion and noise error components is known.) in 1985 (applicable to optimal filter media in 90's), digital unrealizable filter implementation by digital realizable GARMA filter in 1985, detection theory based Image processing models in terms of e.g. random signal detection by GARMA filter in 1985; stereo sound reception in ears (source unknown) in the fall 1986 useful in sound beam generation and propagation, thought communication transmission from any distance since 1986. Additional author's work can be summarized as: observation of light beam from dark sky at home garage in winter 1986 useful in super high resolved beam generation; dream based non-overlap beam resolution research since March 1987; amplitude and/or phase-only incoherent (spells InCoherent, E. Gupta, 90's) media transformation from deterministic to randomness in 1988, calculations of media effects by the difference in the number of diversity chips required for known signal detection and media transformed

random signal detection in 1988; multilevel model of a multi-layer managed company in the fall 1988 in terms of specific, another and other persons; M/M/1 of arrival size 2 network model for the meteor burst and general random channels in 1989; dynamic behavior model in 1989-90 in terms of window selection for specified spectral (-neighbor) leak in multidimensional detection (-downward or upward slope or rotational plane or multilevel subsequent ball play at the deterministic or stochastic wall) in the presence of "original planner" (-strong, equal or weak colored noise).

In 1990's, the progress in models can be summarized in three categories— (i) real models: deterministic and ripple components reformulation of Rician channel and dynamics, (ii) company process models, (iii) invisible models. Analysis of the invisible models in terms of imaginary z component of xyz complex (real xy and z, x deterministic and y random component) data is of continued investigation. These Emistical Jprocess models are:

(i) Media [J. Gupta, e.g. 11/1991] and atmospheric media [J. Gupta, 7/1993] as bundle of strings (-forward known wall selection or backward subsequent process wall selection), body growth and decay model and corresponding media equalization, process 1234 growth and aging as 4321 models ([3], also 9/27/98), string media analysis by quanta (-fluctuation as ball play on the wall [3]) and ether theory (-⁰_u[3]), application of known quantum and nuclear physics in packet or burst transmission, coded (long overlapped or super high resolved) media, coded process media, multi-media process by media names, cause of multi-media (as ionosphere-spells as Iknowsphere, meteorscatter-subsequent metOR) in addition to atmosphere as minimization of uncertainty in a media and to exactly determine the idea person by multi-media diversity, general media characterization, subsequent resolution of system inputs as impulse, gate, white noise etc. (deterministic, random etc.), chaos synthesis by dynamic differential equations, curvilinear media model (10/9/1996), multilevel multichannel multidimensional media, classification of data in terms of signal, noisy signal, optimal, and dynamic models, and their applications to media and vice versa; optimal propagation, stochastic differential equations based media model and corresponding optimal filters for known noisy, partial-random and random noisy media, anisotropic differential equations synthesis by optimal filter, envelope and complex envelope of H(jw) model rather than H(jw) implementation from spectral density synthesis, oscillator model for fertilization system.

(ii) Input-output model of a company (and its mirror) in terms of arrival of an (- in terms of travel by the) individual and company reorganization to result in the outplacement (or addition) of an individual in spring 1991; Emistical model for the transport of the multidimensional stochastic theory (in terms of hot or cold? weather map [3]) to the subsequent specified wall system (implies subsequent known window as topic selection or director or pick up at wall or fluctuations on the wall) in forward GAMA dynamics [3] in July 1991; calculator (in terms of the spectral moments number meanings) based operational cost model by the temporary business woman in the fall 1991 (rather than known budgetary constraints); dynamic Kroll

(die dynamics) interfered body part specification, e.g. in terms of business, performance; dynamic body parts names; observation of GAMA dynamic bi-directional hill then climb process in October 1991 with applications to connections; body temperature mean (cold-extra, thus need to select window, K. Gupta, spring 1989) useful in body dynamics simulation; man and woman fertilization body alignment in terms of M-ary transmission and reception through the media, process input and output multilevel multidimensional graph resolution (as body, spirit), Euniversal map media, A BE CD dynamics in 90's, process transparency model, multi-media model in the electronic world and in the solar system in Eupta Euniversal generalized non-linear function, sound propagation inside body as media, production and criticize economics models [3] rather than demand and supply economics, body price model, (dual currency exchange rates model for original and business products, 8/3/2001); multistep media representation of muscle strength fluctuations as capacity fluctuations (8/4/1998).

(iii) Sun outplacement model as "Eingbang" model, existence of 5th energy as synergy (-life start to rebirth, 6/9/98, also implies multidimensional researcher connections by business planner [title of [3] meaning in terms of dynamic steps] in the presence of subsequent original researcher!), chemical transmission model, 7 colors rainbow meaning and its location appearance reason, multi-colored visible and invisible body transmission, realization of nodal relational connections by this author in March 1980, nodal sound receptions in the mind since 1981; invisible man appearance in the living room in 1985-86 calendar year, invisible relative Gvp appearance near the hallway wall, both arm's invisible shadow image appearance (9/3/1998), invisible daddy sound propagation in the stomach, and thus invisible materials model possibility.

Coded diversity through the media is identical to the repetition through the fuzzy (-confused) brain [4]. This confusion results in the mod K game (based on the subsequent window selection behavior model in the presence of proposer in 1990's, A. Gupta, 2/23/2001). In this dynamic game, the person with life-idea or the life-idea person applies repeatedly in the multi-process worlds (it is expected to be 3 worlds, since c is squared [3], A. Gupta, 3/25/2001) in the universe. This universe is frequently organized by process nuclear (spelled New clear) game [3]. Thus the general Emistical media, consisting of one or several media as troposphere, is split [3] in terms of the sum of deterministic + fluctuating + ripple ("ripple" + white noise) and corresponding multistep dynamic differential equations. Chaos can thus be simulated as coded multichannel multidimensional functional and/or finite order feedback input dependent curvilinear system with memory and with probability distributions. The corresponding invisible and inverted visible (and vice versa) map is streamlined in Appendix B at Eatomic levels for future enhanced nodal resolution with application to body dynamics, genetics and idea person determination. From the analysis of the paper "On Interference Effects of Memoryless Distortion in PN Spread-Spectrum Systems," (A. K. Gupta, 1984 IEEE Globecom Conference, Atlanta GA), it was concluded that multilevel phase modulation

through nonlinear devices creates harmonics in the same way as binary 01 modulation (rather than known different ways). Therefore, only binary signals (with application to Boolean algebra Emistical genetics, even for multilevel Emistical males and females) should be transmitted. The effects of dynamic system on binary signaling for distortion analysis, growth and storm analysis, and analysis of trilevel signaling (0, 1 with donotcare inclusion) are of future interest for streamlining.

In summary, the fat mobile arbitrary shape multistep nodal points can describe the multilevel multidimensional multichannel media on the topic (e.g., optics), with geographic traffic map rules. These visible and invisible points and geographic traffic (e.g., one-way) map connections have potential to organize, operate and subsequently reorganize; such that growth, decay, storm, earth shake, explosions can occur. The media analysis have applications in genetics, particle motions, chemical reactions, weather variations, stable explosions, big bang, picture development similar to Xeroxed clones and subsequent body growth etc. From the receiver dynamic map with process numbers, cascaded area multibeam split decoding method is analyzed in [3] to search dynamic nodal clusters and to identify the specific node with the life idea.

5. DYNAMIC MULTIDIMENSIONAL DISTINGUISH MAP SYNTHESIS

In 1978, this author split a complex envelope signal into time domain amplitude and phase (similar to Bode diagram) for spectral moments [12]. This author represented, in 1991, a multidimensional signal (and digital data) by coded and modulated multidomain transformed data via matrices. Such signal communication can be termed multidimensional complex envelope communication, rather than known coherent and incoherent communications. This author derived no side lobe patterns for the mobile grid via mobile points, as space array elements, with known induced Doppler (space-time-frequency domain points) in 1979 and its multidimensional generalization with transformable dynamics was done in 90's. With this generalization, mobile points can be rearranged in terms of multidimensional beams, possibly including missing points situations. This author proposed fence-like beams in 1986 and dome protection (-umbrella in terms of subsequent window selection, K. Gupta, 1994) coverage for a volume on 5/1/2001, rather than meteor scatter circular area coverage and targets/ target detection in decoys through the media. Based on other space-based weapon threat presence (e.g. Hindustantimes.com, 4/15/2001), dome protection is a solution to the space protection problem definition, known as specified space defense initiative. Thus subsequent multidimensional window selection search (-dynamic outward travel to inward company window for policy) in the presence of fenced-in sun as proposer in the universe identifies the nodal connections and a node containing the life idea. A multidimensional mobile multibeam pattern can therefore be derived from a mobile grid, such that pattern represents a multidimensional nodal network with interconnections as a map. Interconnections identification in the dynamic map for parent selection in the next life and previous history path is an unsolved research problem. With

this analysis, the scattered nodes of the dynamic map in the similar (or different) dynamic maps in the universe can again be reconnected back to the dynamic map in the Euniversal map.

In this section, we synthesize arbitrary placed nodes by multilevel multichannel multidimensional dynamic non-overlap map beams in three steps, such that data dependent map formulates bi-directional GAMA dynamics and it's opposite [3]. Detailed mathematics of this map is yet to be developed for nondynamic and/or dynamic data. *These steps are:* (i) Euniversal map derivation from GAMA dynamics, (ii) nodal overlap in multidimensions, and (iii) nodal growth and decay.

(i) Map is derived from many concepts, e.g.: process communication links among invisible and visible inhabitants in the universe and bi-directional transfer function from invisible world to visible world and vice versa [J. Gupta, 1/1992], Emistical method to resolve 'who gave the idea' via 2 robot pictures (2/1992), body motion steps and its dynamic map, Emistical molecular structure dot game (2/92), Emistical building block growth, structured problem definition (- puzzle formation from the data pieces, E. Gupta), Emistical egg shuffle and invisible nodal communication among eggs (5/24/92), body graph, Euniversal map (E. Gupta, 5/24/92), sound creations inside the body locations, multilevel egg beams map, molecular maps (E. Gupta, 5/16/93), multilevel gear in the stomach, Emistical computer data transfer (test text reading ability of processor and sun) in Emistical art (5/24/92), diverse spectrum of people classification e.g. by collective management-unionized, multidimensional data management by map, traffic management map, process geographic map with coasts, profession, plains (spells plans). An Emistical art [E. Gupta, 11/1992] of a hotel with workers on the top floors, - upside down hotel, implying upside down reorganization due to a subsequent original proposer! is also helpful to understand level managed sponsorship. Additional concepts can be summarized as: inward broken cord connection to the company and up and down fetus level to parent (K. Gupta 1986), kid's first cry reason, identification of 0 (-male), 1, and both (-Enunch, also reasons of head first birth in terms of outward dynamics; K. Gupta, 1990's) in Karnaugh map algebra for genetics and, their real and imaginary distinction outside stomach (e.g. relative G. K. Gupta, 3/1980) and inside stomach (90's), invisible spirit sounds in the body including in the mind.

Based on this data (e.g. genetic data), the map is built (5/1993), for who gave the idea determination, from the process and nodal graph via known matrix company organization, consisting of e.g. supervisors, individuals, employees, overhead, research, contracts, marketing, support, human resources, department and section and union managers. The problem to resolve, therefore, is to estimate each coefficient of this matrix (-map) exactly to classify each matrix variable (-point) by certain criterion to determine who gave the "life" idea. Company dynamics is caused due to original proposer sun! travels in the company from outer organization. It results in who gave the idea environment and subsequent window selection with polarity-coincidence addition of business planners and

subtraction of original planner. In the mirror company [3], reverse dynamics takes place with the polarity-coincidence additive and/or multiplicative interactions between original proposer and business planners. In 90's, GAMA dynamic model and corresponding dynamic filter was developed from the multidimensional translational matrices and subsequent transformations. These matrices of the mirror company are similar to the company dynamics representation by this (specific-subsequent window selection) or another (-business plan outward motion) or other (-contract policy) persons and in terms of M/M/1 of arrival size 2 model and its corresponding optimal filter.

(ii) This company reorganization (flat earth cluster dynamic step union and reversible bi-directional dynamic motion downward) or mirror company organization (absolute upward motion growth, resulting in subsequent dynamic decay) and vice versa affects social and weather patterns. From the inner genetics to baby growth and then from body decay to outplacement as soul for multilevel genetic reincarnation, a mod K game map identifies subsequent overlap nodes. The bi-directional feedback filter, however, identifies and tracks nondynamic, dynamic and overlap nodes. As an example of overlap nodes, in terms of various topics, is exponential decay in semiconductors, when strobe light is flashed (lifetime measurement assignment, B.Tech. Thesis, Indian Institute of Technology, 1971). This topic is similar to specified pulse to pulse delay dependent blood pressure (as a known extension of known few samples delay measurements) decay measurement (M.S. work at Tufts University, MA, 1973), decreasing data rate performance graph due to exponential decay in received signal in pulse ray traced variable delay meteor scatter system (M.D. Grossi et al. 1977 Agard) and author proposed flat data rate equalized systems and media continuity approach in one dimension or multi-dimensions. This topic is also similar to body age, YO growth and decay. Flat implies baby's YO full of water (lying on back) is straight upward [Aunt Nirmal, 3/7/2000, also 5/16/2000] and as baby grows, YO becomes curved. Lifetime (-life meet) measurement is also similar to subsequent window selection (-talk as backward window selection, relative Dr. Ranjana, 3/1980), resulting in body decay or growth. Life node in the reorganization can be forward (-out placed sun propose in the meet) or backward (-need as signature node self-out placed, K. Gupta 2/1992). The forward pointing node can be a multilevel process (out placed sun! is forward meet, K. Gupta 2/1992) in terms of original proposal, need assignment, talk-policy assignment as unborn baby in the water, research applications, theoretical proposal or sponsor of colleague parents (thus genes can reside with either parent resulting in confusion in parent definition [3]). The backward node (as body going downward or body going upward or body listen, resulting in reversal) can only be subsequent limited work. Therefore, subsequent window selection by Right as lifetime; in the presence of forward propose, theoretically mean as colored noise; results in dynamic body motion. Thus, known electrodynamics of moving bodies in 1905 (-year S or E. A GAMA dynamics step can be written as Kprocess Aemistical, e.g. A. Gupta, 8/1994) can be explained [5] in terms of subsequent window selection (-one way dynamic operation, also right selection by the window!) in the presence of subsequent opposite multidimensional business

proposal on the slope (-bi-directional level gear). It results in the union of forward multidimensional plans as programs, proposals, and original proposals. This union is similar to known unification of four forces (1978 physics noble prize to 3 people, also mentioned by M. D. Grossi to this author in 1973). Since force can be deterministic, quasi-random and random, unification can be for deterministic and/or random forces. The concept of coherent joining (merge as in the traffic) of coherent, semi-coherent and incoherent (A. Gupta, 7/26/2001) forces, rather than unification of known forces is yet to be researched by subsequent exact window selector in terms of union of multidimensional Forces [3].

The similarity and difference among various topics in terms of primary and secondary topic can distinguish and classify these topics dynamically as ABCD. As described in [4], population inversion in the social dynamics, due to window selection by Right? (-center knows two-sides, one of which is up! another is propose), can be termed as dynamic operation and the population inversion in symmetric npn or npn junction is termed as Emistical Eoperational Emplification. Note that both sides of the junction are identical. Research continues to differentiate both or multisides and corresponding applications, possibly in a growth filter fabrication. Therefore Eoperational media can be process inverted in terms of growth filter. Eoperational media inversion is identical to mirror of lifetime (-meet life) robot (spells as rowbought) propagation concept (-life travel to meet subsequent window as topic), and is equivalent to the YO extension Mossbauer (spells as massbuyer) nuclear effects (-mass travel to YO) by certain complex (-visible and invisible) genes. The similarity between robot and mirror Mossbauer concepts on a nodal graph is of further research. Similarly, cardiovascular system with heart valve and genetic process switch for arbitrary gene entrance to media nodal map is of further investigation. System design for growth filter is yet to be formulated. Therefore, various topics can be level connected. This author in 1988 simulated the media in terms of a network model M/m/1 (-m level <= M level) of arrival size 2 model and in 90's simulated a media network in terms of dynamic nodal map. It is to be noted that nodal map is different (also J. Gupta, 3/23/2001) than network model in terms of traffic directions, multidimensional multilevel multichannel dynamics, inclusion of disconnected nodes and in terms of large number of process node connections.

(iii) GAMA dynamics thus can be formulated in terms of multilevel multidimensional translational matrices; such that dynamic growth and decay of the company organization, body motion, state of the body, overlapped nodal map can mathematically be analyzed by sets of nodes. The nodes can be clustered in an area (area coverage) or in sub-areas (area resolution) or in identified beams. These nodes can be exactly dynamic, ripple and/or fluctuate. These nodes can also be level interfered as ill nodes in body area dynamics (microscopic job can cause eye as optical problem in body map, talking to other lower professional can result in heart break sound; and opposite body growth by going downward dynamically results in dynamic operation, K. Gupta 3/1989; also dying statement in 1991 fall). Also EKG (in 2000) of statistic department head relative K. G. Kansal's fluctuations can be streamlined by recognizing the level

adjustment need. Thus EKG, BP (Emistical interpretation of EKG vs. BP, E. Gupta 11/4/1996, also kidney stone interpretation in 1/1992) and heart sound (as heart break, K. Gupta, spring 1989) describe heart condition. After writing, in 2000, the reverse streamlining possibility of Emistical states, the author learned that this statistics head – R?, Krishana Gopal, died due to the stoppage of EKG fluctuations (random statistics, rather than streamlining, and subsequent exact random step selection). The body degradation (Kroll) occurs due to process multidimensional listening, creating the need to subsequent level alignment. For body media, nodes adaptation including equalization by drugs and vitamins as inputs results in body modification, body behavior, character, personality, relations, growth and decay. Nodes grow and decay due to meat (Emistical meet-under or above window) and vegetables (spells VgTable). A node, in general, is a distorted and interfered signal detection problem in colored noise. The signal can be probabilistic, known, partially known, anomalous or random. Signal detection previously has been researched as signal characterization/ noise analysis/ signal in white noise/ media characterization/ media distorted signal in white noise/ diversity communication in amplitude WSSUS media and white noise/ signal detection in colored noise/ superresolution/ multidimensional detection/ “distinguish” systems in 90's. This author theoretically analyzed the general problem of processing (in terms of gain or loss or equalized, - up or down or equal and vice versa) of general media transformed signals in colored noise in the 1980's. The Emistical science to analyze and stream line dynamic media, data and reception was created in the 1990's, with applications to body dynamics. Signal and interference dynamic overlap however requires the understanding of multidimensionality as stated in Section 3.

This author in 1979 identified intermittent low duty cycle as the meteor scatter media limitation (its process reason for intermittency is yet to be explained in detail) for increased throughput, and proposed flat rate communication in a duty cycle. Similar to meteorburst response equalization, one can envisage semiconductor response equalization and body equalization [3]. In the media continuity communication, scatterers as meteor shower (intermittent nodes) in a volume are connected in a way (e.g., by overlap beams) that duty cycle in an interval for intermittent meteor trails is unity. Therefore by reconnections, the node life span may be increased to the ultimate goal of stable universe with appropriate level adjustment mechanism. Overlapping antenna beams in no noise meteorscatter returns and close sphere packing in capacity calculations for noisy signals are well known. No overlap beams in sphere packing with applications to inner egg shuffling and to outer multidimensional company organization with level determination, adjustment and correlated level inversion (e.g., similar to picture development and growth) result in enhanced and stable nodal resolution. Path loss (or gain) inversion by known vector correlated estimator-subtractor detection is a topic of further research in the context of growth and decay. Conceptual relationships between path gains, media amplification and media growth require further understanding of body growth and image picture development. Thus the growth, amplification and connections decay in the nodal map can be distinguished.

In conclusion, we have utilized media limitation reduction, no overlap multibeams, GARMA (implies homema, ghar-home bounded in closed form [3]; e.g. relative Uma, 9/2001; due to identical ARMA model and GARMA filter transfer function) equalization, media continuity, media stability, media representation by interconnected translational and/or rotational matrix including non-linear elements (diode, mixers, amplifiers); to obtain bi-directional, reversible, continuous, equalized and stable data map.

6. PERFORMANCE ANALYSIS

In this section, we implement digitized super high resolved map in different media and noise characteristics, by considering interconnected multidimensional complex array map with missing connections. The map thus is a multidimensional dynamic surveillance system, operating in heavy noise and jamming environments and arbitrary media characteristics. Good multi-domain discrimination is therefore essential with low or no sidelobes into the volume of space illuminated by the transmitter as in the dynamic body check up. For optimum performance, it is important to have flexible management of these beams, thus ensuring that each beam can be matched to its particular part of the coverage. Fan blades, also as a process device, are needed to rotate patterns (A. Gupta, 5/8/2001) and to evolve corresponding dynamic patterns, such that a wider area is covered by Emistical spreading the waves (e.g. air). Similarly, the generation of sprinkler beams, bent beams, rotate fan beams are somewhat intriguing in super high speed Emistical communication. The development of data transfer function for the cascaded (6/28/2001, 10.50 PM, based on familiar invisible sound) media is a topic of continued research along with the application of various beams in media spread. This analysis is useful in determining the correlation between some parts of the body and in calculating the known affects of a body part function on another body part function, thus resolving the cause of the disease and cause of concern. The problem therefore can be classified in terms of the detection of passive and active multi-sources in real-time environments and the identification of problems. These shortcomings can then be counteracted by tracking these multidimensional sources in parallel or sequentially in cascaded (possibly with slope band gaps due to level adjustment) multi-life scenarios.

With the advent of Cray computer and an increase in the communication traffic worldwide, there was considerable interest in fast and reliable communication in the presence of self, intentional or interference jamming in about 1980. This author in 1982 proposed an integrated approach to the design of a coded jamming-resistant communication system by unifying the advances in signal processing, detection and estimation theory [13, 14], and coding theory. Optimal filters utilizing arbitrary statistics, such as nonlinear estimators, phase-lock loops, provided the approach in modern and future digital communication system utilizing high-speed computers. Such integrated approach in mid 80's was found to be useful in designing known multichannel space-time array. The problem of countering the medium and noise effects lies in developing receivers utilizing

detection theory. Practical linear phased-array antennas in late 80's utilized the assumption of known signal detection with constant amplitude in white noise and directional interference. Furthermore simplified noise models (for clutters and reverberations) were used to whiten the incoming data. This author in mid 1980's relaxed these assumptions in the design by generalized detection with arbitrary signal and colored noise statistics. The noise may be known frequency dependent additive noise, man-made or medium induced. On 8/17/1989, this author proposed a project to design, at system level, a multibeam antenna system with minimum sidelobes in various interference environments for single scan and multiscan systems; and to compute performance parameters as prob. of detection and/or SNR dependent resolution. The waveforms are to include different active/ passive transmit waveforms in a variable distributed sensor system for single or two targets. The project was to include the following: (a) number of elements/ beams required to achieve specified performance as ROC and resolution, (b) obtain minimum sidelobe patterns by possible novel methods and different structures, (c) methods to counteract noise and medium effects, and develop target and noise models, (d) evaluate the effects of underwater medium on performance parameters, (e) develop methods to counter these effects as number of additional elements required to counter random effects, (f) develop real-time methods to counter noise effects and mutual interference, (g) for active systems, specify bandwidth requirements and compute bandwidth/ coding required for specified performance.

In the 1990 report, this author proposed signal and noise characteristics dependent filters for a single target or two targets. For example, the receiver for random fluctuating amplitude is different than that of constant amplitude signal. Number of elements in the existing array is calculated as a linear function of SNR, signal-to-noise ratio. In general, this function is not necessarily linear and is dependent on signal and noise characteristics. For two-target detection, the number of elements will be a function of resolution in addition to SNR. In the report, this author proposed the feasibility of dependence of number of elements on spatial filters. Therefore, the number of elements required can be minimized for a specified performance in a noisy medium by utilizing spatial filters.

Similarly, the number of elements in a multidimensional array is a function of spatial filters. Thus number of element (rather than known tap array elements) requirements can be optimally minimized for a specified performance (based on the previous data and current track requirements) in a noisy and perturbed media and in the coherent, incoherent and multidimensional target resolution.

CONCLUSIONS

In this paper, we characterize a multichannel multilevel dynamic map with connected and disconnected nodes by multilevel multidimensional beams, such that visible and invisible connections among nodes can result in a bi-directional and/or reversible Euniversal map. The connections can be flat or slope or tapered or neighbor. The analytical simulation of these maps is useful in author

proposed signal fetch, suck and pull systems with applications to sound transmission and retrieval in nodal communication in unlimited or limited Euniversal environments. The system design for map growth utilizing body dynamics, media character is a topic of further technological development.

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- [14] H. L. VanTrees (1968); (a) *Detection, Estimation, and Modulation Theory*, John Wiley and Sons, Inc., Part I, II, III. (b) A Unified Theory for Optimum Array Processing, August 1966, Department of naval ships system command report # 4160866. Read part III, chapter 10.5, for resolution problem as the problem of detecting or estimating the parameters of a desired targets or objects as reflectors .

[15] A. K. Gupta (1980); "Arbitrary Spectral Separation of Upper and Lower Sidebands in Linear Modulation," *Proceedings of IEEE*, June.

[16] A. K. Gupta and J. R. Herman (1988); "Improved Meteorburst Channel Model for High-Thruput Communication System," *IEEE A&P Symp. and URSI*, Syracuse, NY, June. Gupta proposed refractive-index dependent Rician channel model, based on parallel known underdense and overdense trails, was modified by first author due to second author's correction of serial underdense and overdense trails presence. Process reasons of parallel possibility, none trails existence and serial mirror presence in a duty cycle are explained (as above or equal and under topics as business plan in the presence of door knock, 10/26/1998) in terms of GAMA dynamics.

[17] A. K. Gupta (1985); "On the Suppression of a Sinusoidal Signal in Broad-band Noise," *IEEE Trans. On ASSP*, August 1985. For the special example of noisy sine signal, a reviewer pointed out to check the identical MSE, in the original table, (and plot graph) of author proposed two-sided Gweiner filter and known ALE. This author earlier, in 1984 *IEEE MILCOM conference*, reformulated ALE by the detection theory for the sum of an arbitrary signal and noise.

[18] E.g. A. K. Gupta (2002); Stochastic/ Dynamic Communication in a General Euniversal Link, *IEEE Southeastcon Conference*, South Carolina.

[19] E.g. A. K. Gupta (2002), "Mix of Heat Transfer Methods, EKG Transmission and Molecular Effects in an Euniversal Link," Abstract, *IEEE Int. A&P Symp. and URSI*, TX, June.

[20] A. K. Gupta (2003); "SUBSEQUENT SELECTION – Known Transfer Function Meet or New Dynamic Map in Eupta Euniversal Function," *Proc. Of 2003 IEEE Int. A&P Symposium and URSI*, Columbus, Ohio.

[21] E. Gupta, "Emistical Physics, Eunification of Borces, Emistical Etomic Models, Emistical Equations," SIGCOM Company, Sept. 14, 1993.

Ashok K Gupta's education includes computer engineering as the minor option in PhD requirements, in 1977, at the University of Wisconsin Madison. Since 1992, he is with SIGCOM Company in the conversion of Emistical Jprocess dynamic language to Emistical communication. Emistical Communication is an exact science, which explains where-wayur dynamic map with process ball play on the location dependent wall. It results in reconfiguration of Euniversal map connections.. Application of the data as 1/1/001 is identical to 1/1/2001; to bidirectional folded universe is intriguing.

As an example, we describe an adventure "From On Board" [E. Gupta, 8/11/93] by a young student. This description explains Emistical forward (to the ship) and backward (to home via alternate route on the bird) theorem. It also explains the rotational ascend steps in reverse direction, from k (pinky name mean in subsequent forward direction) to the subsequent backward idea generation in GAMMA dynamics (Snack Bar) Eupta Euniversal function (ship – snack bar - home). A paper is in preparation to detail deterministic and noisy ascend steps in mathematical

form. Special symbols in [Toe's, hmmm] will be discussed later. Symbol' in I'll (and in other short form) is written for I'll.

From On Board
E Gupta (Full name)

"Hi! My name is Paula Pinky. You know Tom Thumb's daughter and Tina Toe's granddaughter. I'm here to tell you a story about myself and the adventure that I went on. But right now I'll tell you a little about myself. Well now, h'mmm, what's there to tell about me. First of all I'm small and short. I'm also the (word 'the' was erased, however it was visible) adventurous and daring. Well enough about me. Let's get on with the story!"

It was one of those beautiful days and I Paula Pinkie was looking for some adventure. Since I live near the water, I was at the harbor where all the ships come in and out. I always wondered what type of ships they were. Like if they were cargo ships or battle ships, or something like that. I was always so small to find out. Just then a great idea came to me.....

I would sneak on the ship, see what type it was and then rush back out. What a great idea! I walked over to the ship climbed on and what did I see, a huge pool, and the most elegant restaurant I've seen, with lots more. Then it just came to me, I was on a cruise ship. How awesome! Then I heard that noise which usually means that the ship is moving.

Ahhhhhhhhhhhh! Oh my god! We're leaving! I just remembered my mom and dad and my grandma and how worried they must be. I had to get out this ship, I thought. But it was too late, and I was stuck on this ship until we got back.

I was walking on the ship trying to make the best of things when I saw a sign that read "Snack Bar".

I looked at my stomach and noticed that it was roaring. Then I realized I hadn't eaten breakfast for over 6 hours. Well mind as well as get a bite to eat. Then I remembered the restaurant I had seen when I went on board. So I walked over for some food. After I ate I left the restaurant, oh yeah, just in case you might want to know. I had a delicious turkey sandwich with some fresh mashed potatoes and peas with a coca-cola classic to go right with it. As I was saying before, I left the restaurant and decided to look around more.

After a few days had past, I, Paula was as tired as you could get. I was also very very very homesick. But even though I was homesick, I couldn't help feeling a bit fascinated. I explored the whole ship. They restaurants, pools of different sizes, a ballroom for dancing, a kiddie play room, and little shops selling goods. Just then the ship slowed down it stopped at an island covered with big palm trees and light brown sand. I walked around the island thinking how I could get back home. Sure this ship was wonderful and terrific but I missed home. Just then I got an idea. It was one of the best idea I've ever gotten. The plan was to find a bird, climb on, steer it to go home and presto, everything would be back to normal. The getting the bird part would be hard but I'd manage it somehow. Oh my god, what a perfect day. I had just spotted the perfect bird. It was about five feet away, it had a white coat and a shing beak, I went over and climbed on. The bird's feathers were so soft and downy. I tried to steer the bird in the direction of my house and we took off. It was fun and scary. When I landed at my house I saw my family outside with worried faces. I told them my story and they were happy I was home.

Application of the function and above stated dynamics in genetic, nuclear and internet physics etc. is in preparation. A paper is also in progress on the Jprocess GAMA dynamics [3] with application to the body genetics. We report an original work by a young writer [J. Gupta, 8/31/94], titled 'MS rasBarey'. 'Ms rasBarey went to schoil toDay, and one of her kids Brout A magic box. but ms rasBarey didnt Believe it. So she let him use it on her. When he said the magic words she turned into a Saykeyl o (name changed by the author). and it was time for gym, but the gym teacher was sick. so the prineapal hired him for a subsatute for them. Fortunetly the unit was basketball, after snack it was recess and every-body would love to have a teacher like Saykeyl o. and the gym teacherwas fired and Saykeyl o got hired for a gym teacher there.'