ΕΡΕΥΝΗΤΙΚΟ ΙΝΣΤΙΤΟΥΤΟ ΧΗΜΙΚΗΣ ΜΗΧΑΝΙΚΗΣ ΚΑΙ ΧΗΜΙΚΩΝ ΔΙΕΡΓΑΣΙΩΝ ΥΨΗΛΗΣ ΘΕΡΜΟΚΡΑΣΙΑΣ

Οδός Σταδίου, Πλατάνι, Πάτρα
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ΣΕΜΙΝΑΡΙΟ

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ΘΕΜΑ: **MULTIDIMENSIONAL VISUALIZATION AND APPLICATIONS**

ΤΟΠΟΣ: Αίθουσα Σεμιναρίων ΕΙΧΗΜΥΘ-ΙΤΕ

ΗΜΕΡΟΜΗΝΙΑ: Δευτέρα, 24 Σεπτεμβρίου 2001

ΩΡΑ: **17:00**

ΠΕΡΙΛΗΨΗ

People working on multivariate (multidimensional) problems will benefit by understanding the underlying geometry; that is, learning what is possible and what is not. For example, in 1917 the physicist Ehrenfest showed that planetary orbits are stable only in dimension 3. Another dimensionality result is that rotating bodies have an axis of rotation only in odd-integer dimensions. The applications presented here will be more down to earth!

With a system of parallel coordinates a one-to-one mapping between subsets of N-space and subsets of 2-space is obtained. This leads to synthetic constructions algorithms in N-space involving intersections, proximity, interior point construction, "Line and Plane Topologies" useful in Computer Vision and Geometric Modeling, as well as Collision Avoidance Algorithms for Air Traffic Control. Applications to Visual Data Mining are illustrated with real datasets on Process Control, Yields in VLSI production, Financial, Feature Extraction from LandSat Data etc. A new geometric Automatic Classifier is demonstrated on several high-dimensional datasets. Time permitting, a Decision Support system capable of doing Feasibility, Trade-Off and Sensitivity Analyses will be included.

Για περισσότερες πληροφορίες μπορείτε να επικοινωνείτε με την Κλεάνθη Ζαχαροπούλου
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