

Distinguished Lecturer Series “Leon the Mathematician” at the Department of Informatics, Aristotle University of Thessaloniki Greece (<http://dls.csd.auth.gr>)



## **INVITED LECTURE**

**Anita Wasilewska** (Associate Professor, Department of Computer Science, State University of New York at Stony Brook, US) is going to give a lecture on:

### **“Descriptive Granularity”**

at the **Room B of the Department of Informatics of the Aristotle Un. of Thessaloniki on Wednesday June 22<sup>nd</sup>, 2011 at 12:00.**

### **ABSTRACT**

We define a notion of a descriptive granularity and present its formal syntax and semantics. We do so in terms of three abstract models: Descriptive, Semantic, and Granular. The Descriptive Model formalizes the syntactical concepts and properties of the data mining, or learning process. Semantic Model formalizes its semantical properties. The Granular model establishes a relationship between the Descriptive and Semantic models in terms of a formal satisfaction relation.

We will also give a short overview of history of Foundational Studies in Mathematics as a source of process of building Foundations of Computer Science.

## About the Speaker:

Anita Wasilewska  
Associate Professor  
Department of Computer Science,  
State University of New York at Stony Brook  
NY, USA

email: [anita@cs.stonybrook.edu](mailto:anita@cs.stonybrook.edu)  
www: <http://www.cs.sunysb.edu/~anita/>



Professor Anita Wasilewska is a representative of the Polish School of Mathematics. She is a direct Ph.D. descendant of Alfred Tarski (Warsaw, Berkley). Consequently though the founders of the Polish School of Mathematics she is also a direct Ph.D. descendant of Nicolaus Copernicus (Mikolaj Kopernik), 1499, as well as Gottfried Leibniz, 1666, Immanuel Kant, 1770, and Desiderius Erasmus of Rotterdam, 1497. Her other direct ancestors include Andrei Markov, Pafnuty Chebyshev, Emile Borel, Henri Lebesgue, Joseph Lagrange, Ganston Darboux, Pierre-Simon Laplace, Jean Le Rond d'Alembert, and Leonhard Euler.

She has earned her Master Degree in Computer Science (Professors H. Rasiowa and Z. Pawlak) and Ph.D. in Mathematics (Professor H. Rasiowa) from Warsaw University, where she consequently was a faculty of the Mathematics Department from 1967 to 1983. She came to the United States in 1980 as a visiting Assistant Professor in Mathematics at Wesleyan and Yale Universities in Connecticut, before joining Stony Brook's Department of Computer Science in 1986.

Her latest research interests are in Granular Computing and Foundations Data Mining. She has also published papers, books, and edited books in many domains ranging from Classical and Non-Classical Logics, Automated Theorem Proving, Formal Languages, Theory of Programs, Foundations of Rough Sets in which she was one of the pioneers, to generalized Fuzzy and Rough sets, and Machine Learning. She has also pioneered research and Conferences in Mobile Computing for Global World.