



*THE CITY UNIVERSITY of NEW YORK  
APPLIED MATHEMATICS SEMINAR*

***Multi-Variable Optimization Challenges Described by N-dimensional  
Continuously Differentiable, Dynamic Vector-Functions, in the Digital  
Product Design and Digital Manufacturing Domain***



*PRESENTED BY:*  
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**Friday, December 14, at 04:00 PM**  
**Room: 4419 (Graduate Center of CUNY)**

*This research seminar will highlight the complexity of Multi-Variable Optimization Challenges Described by N-Dimensional Continuously Differentiable, Dynamic Vector-Functions, in the Digital Product Design and Digital Manufacturing Domain, as well as show some promising directions to come up with realistic solutions.*

*In simple terms, Digital Design and Digital Manufacturing means to design, simulate, manufacture and test first on the computer screen, in the digital domain, and then build physically only when everything is working fine, and optimized. In our rapidly changing global and competitive world, the key is to continuously learn, innovate, and develop new, efficient and effective products, processes and services, that are successful. Since our systems are increasingly complex, with Digital Design and Digital Manufacturing we can create products, that work well and satisfy customers first time. Global challenges are pushing our industry and society to continuously improve, to become leaner, more cost effective and efficient, higher quality, and innovative, therefore we need to research and develop new optimization methods and tools in the Digital Design and Digital Manufacturing domain. This is why the above described research topic is essentially important.*