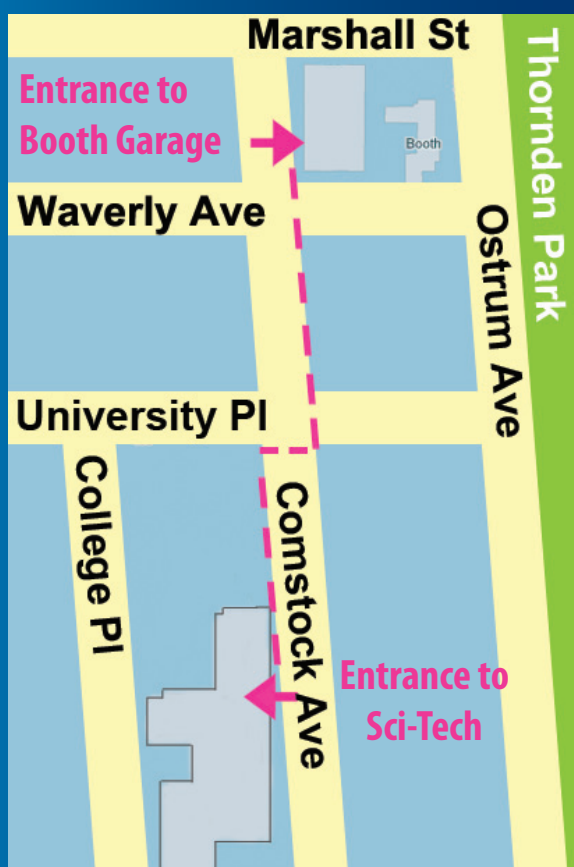## Monday July 1
6pm

Syracuse University
Center for Science and Technology
(CST, Si-Tech)
Room 4-201
Refreshments will be served

Parking for this event is free in the Booth Garage. You must say that you are parking for a CASE event for free parking.

Computational Electromagnetics in the Frequency Domain

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Finite methods are nowadays widely used for the analysis and design of complex electromagnetic structures. Among these methods, the Method of Moments is the most popular numerical technique for solving electromagnetic problems formulated in terms of integral equations, whereas the Finite Element and the Finite Difference methods are used to model problems in terms of differential equations. These methods share common features, have complementary advantages and, in advanced applications, they are often used in combination, possibly enriched by exact or asymptotic solutions of appropriate canonical problems. This presentation is intended to provide an in-depth coverage of the Moment Method and of the Finite Element and Finite Difference Methods, with discussion of absorbing boundary conditions and of hybrid methods. Particular applications can be considered in detail, such as problems involving nonlinear and/or anisotropic materials, as well as complex geometries.