



Please Post

The Washington-Baltimore Section of the
Society for Industrial and Applied Mathematics
is pleased to present an expository lecture

Validating Approximate Solutions to Ill-Posed Problems

by

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8:30 pm, Wednesday, May 13, 2009
University of Maryland, College Park
Mathematics Building, Room 3206

Abstract: Forming the image from a CAT scan, determining from external measurements whether a nuclear reactor has a crack, and taking the blur out of vacation pictures are problems that are ill-posed. By definition, small changes in the data to an ill-posed problem make arbitrarily large changes in the solution. Many algorithms have been proposed for solving such problems, but how can we hope to do this using noisy data and inexact computer arithmetic? In this talk, we discuss several methods for validating approximate solutions to such problems using techniques such as residual periodograms and confidence intervals. Some of this work is joint with Bert W. Rust (NIST) and James Nagy (Emory University).

Join us for dinner with the speaker beforehand!

Dinner will be held at Adele's Restaurant in the University of Maryland Stamp Student Union at the University of Maryland, College Park. Dinner will begin at 6:30 p.m. Four entrees are available for your advance selection: Fire Grilled Steak Stack (\$35.00), Jack Daniels Glazed Salmon (\$32.00), Chicken Marsala (\$27.00), and Mushroom Ravioli (\$27.00). The pricing is inclusive of salad, entree choice, all soft beverages (sodas, coffee, tea, etc.), tax and gratuity. A list of optional desserts will be offered at an additional \$5.95. To attend the dinner, please send your entree choice along with a check for the appropriate amount (made out to SIAM Washington-Baltimore Section) early enough to be received by Monday, May 4, 2009, to our Secretary-Treasurer, Jeff Sieracki, PO Box 1011, College Park, MD, 20741. PLEASE include your full name and email address with your check so that we can send you a confirmation of your reservation. If you cannot get your check to him by that date and you still want to come to dinner, then please email him by Monday, May 4, 2009 at jsiam@sr2group.com. We can accommodate at most twenty-five diners on this occasion, so be sure to reserve in advance.

This announcement, along with directions and parking information for UMD-College Park and Adele's Restaurant, can be found at :

<http://www.siam.org/sections/wash-balt>