

General Information  
U.S. Army Conference on Applied Statistics

Registration:

To register for the conference, please complete the conference registration form included attached with this e-mail and available at [www.armyconference.org](http://www.armyconference.org). A registration desk will be maintained at the site on Monday, Wednesday, and Thursday beginning at 8:00 AM and during the social Tuesday evening. The registration fee for the conference is \$250 or \$275 on site. Students in area colleges/universities are asked for a nominal \$25 fee. Retirees wishing to attend are asked for \$125.

Short Course:

A short course "An Introduction to R," offered by Dianne Cook (Iowa State University) will precede the conference on 20-21 October. The 2-day tutorial will start at 8:30 AM Monday and will be held in the computer lab, Room 414, Mallory Hall on the campus of the Virginia Military Institute. Check for updates at [www.armyconference.org](http://www.armyconference.org) for other specifics regarding tutorial structure and materials required to get the most out of this opportunity. An abstract appears in this document. The tutorial is included in the registration fee. We ask that you pre-register for the conference by mail or fax, with or without payment, so that we may estimate conference and tutorial participation. An optional reference book, "Modern Applied Statistics with S (4<sup>th</sup> ed)" by Venables and Ripley will be available at a conference discount while supply lasts.

Lodging:

Sleep Inn & Suites, 95 Maury River Road, Lexington, VA 24450  
Phone 540-463-6000 / Fax: 540-463-6002  
\$70/\$70 Single/Double, \$10 Fee  
Reference: VMI Applied Statistics  
Cut-off Date: October 3, 2008

Comfort Inn Virginia Horse Center, 62 Comfort Way, Lexington, VA 24450  
Phone: 540-463-7311 / Fax: 540-463-4590  
\$70/\$90 Single/Double  
Reference: US Army Applied Statistics  
Cut-off Date: September 19, 2008

Best Western Inn at Hunt Ridge, 25 Willow Springs Road, Lexington, VA 24450  
Phone: 540-464-1500 / Fax: 540-463-5345  
\$70/\$99.99 Single/Double  
Reference: US Army Applied Statistics  
Cut Off Date: September 19, 2008

**Note the cut-off date for two hotels is September 19, 2008. Per diem is \$70/\$39.**

### Social:

A social will be held on Tuesday evening at 6:30 on the 2<sup>nd</sup> floor of Moody Hall. Join us for a cash bar and light fare.

### Wilks Award Banquet:

The U.S. Army Wilks Award is periodically given at this annual conference to a deserving individual who has made a substantial contribution to statistical methodology and application impacting the practice of statistics in the Army. The award was established to commemorate the career of Prof. Samuel S. Wilks and especially his service to the Army. Recipients to date are Robert Bechhofer, Bernard Harris, Herbert David, Nozer Singpurwalla, Emanuel Parzen, Francis Dressel, Stuart Hunter, Marion Bryson, Boyd Harshbarger, James Thompson, Malcolm Taylor, Douglas Tang, Jayaram Sethuraman, W. J. Conover, Robert Launer, Edward Wegman, C.R. Rao, Eugene Dutoit, Donald Barr, David Scott, Barry Bodt, and Wei-Yin Loh. Please join us on Wednesday evening on the first floor of Moody Hall to share in this annual banquet event and congratulate this year's winner. Tickets are included in the registration fee.

### Campus Tour:

History is an important part of the VMI experience. Time will be set aside late Thursday morning to allow for cadet-led campus walking tours for conference participants.

### Other Site Details:

The conference and tutorial will be held on the campus of Virginia Military Institute in Mallory Hall. The general sessions will be held in the auditorium, Mallory 135, and breakout sessions will be in both the auditorium and in Mallory 119.

Getting around VMI is not difficult. It is a short 5-minute drive from the hotels. We encourage you to carpool when possible to help with parking availability. The site map linked from our conference web site (local arrangements / directions) takes you to the visitors map. The approach is from the north, coming down Route 11. At the split, you will bear right and then turn right onto Letcher Avenue (a one-way street). Lee Chapel will be on your left. At the first intersection with the parade loop, Moody Hall (site of the social and banquet) is on your left. Past the first turn for the parade loop, immediately to your right on Letcher Avenue will be, in order, an admissions office, science building, and then Mallory Hall (site of the conference and tutorial). Parking will be available in spaces around the parade grounds and, if weather permits, on a section on the parade grounds marked for ACAS parking. A more detailed map with building names can be accessed from the bottom of VMI page referenced above under the [post map](#) link.

To learn more about the Lexington, we visit <http://www.lexingtonvirginia.com/>. For more information about our host, visit <http://www.vmi.edu/>.

Program:

Agenda updates will be posted at <http://www.armyconference.org>.

Short Course Abstract:

## An Introduction to R

Di Cook  
Iowa State University

The purpose of this course is to get started using R. R is an environment for data analysis. It contains the latest in statistical research methods, contributed by experts across the globe, and has the capacity to produce quality graphics. R is also complete programming language, so that new methods can be readily developed. This introductory course will be an elementary course for new users and practitioners having little experience with R. The focus will be on using R for exploring and modeling data. It will cover:

- \_ An introduction to the R language (using graphics)
- \_ The basics of handling data
- \_ Basic math and vectors
- \_ Producing data plots
- \_ Simulation
- \_ Reshaping data
- \_ Being lazy with R
- \_ Interactive graphics
- \_ Statistical modeling of data
- \_ Exploring multivariate data

We will practice all of the material discussed, so it is recommended that participants bring their laptops equipped with: R version: 2.7.1 or later Packages: MASS, ggplot2 (and dependencies) For more advanced participants: ggobi software (2.1.7 or later) and rggobi 2.1.9 R package.

These two books might be useful reading in association with the course:  
Modern Applied Statistics with S (4th ed), (2002)  
W.N. Venables and B. D. Ripley  
ISBN 0-387-95457-0

Interactive and Dynamic Graphics for Data Analysis, 2007  
D. Cook and D. F. Swayne  
ISBN 0-387-71761-6