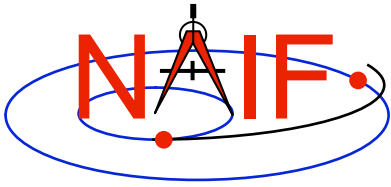


Navigation and Ancillary Information Facility

Welcome to the SPICE Tutorials

September 2009



Class Objectives

Navigation and Ancillary Information Facility

- **For you**
 - Provide an overview of the entire SPICE system
 - Provide a sense of the purpose and uses of SPICE
 - Provide an introduction to the use of primary SPICE components
 - Provide examples of how to use SPICE software and data files
 - Provide some insight into conventions and common problems
 - Provide a variety of “hands-on” programming exercises
 - Provide a peek at new capabilities being worked on or considered
 - Familiarize you with available SPICE resources
- **For NAIF**
 - Get student’s feedback on today’s SPICE system
 - » Especially what’s hard to understand, hard to use, missing
 - Get student’s suggestions for further development of SPICE
 - Get student’s suggestions for improvements to NAIF support of the space science community



Class Scope

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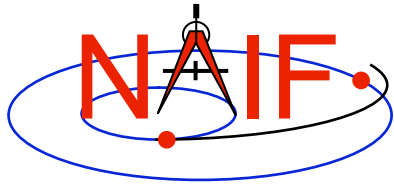
- **Broad coverage**
 - Begins at a high level, but quickly drills down to details
 - Touches on many SPICE-related topics that could be of interest to science and engineering teams
 - » Depth of discussion varies somewhat amongst topics
- **Provide information for FORTRAN, C, IDL and MATLAB programmers**
- **Some topics are addressed very little or not at all**
 - Archiving SPICE data
 - Much related to kernel production



Repeated Material

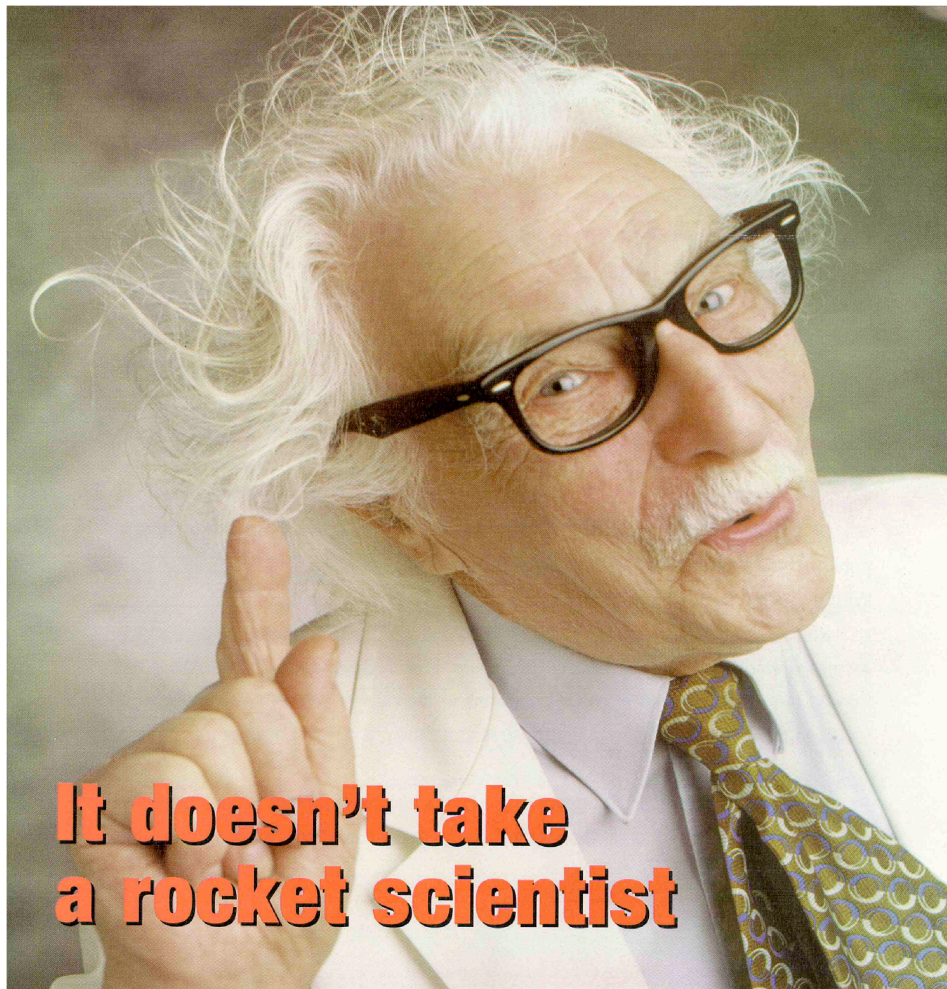
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- **Some topics will be repeated in two or more tutorials**
 - **We're not trying to bore you, but...**
 - » **we don't wish to assume people will read all of the tutorials at the same time**
 - » **we think some items are sufficiently important to mention them more than once**



Your SPICE Odyssey Begins Here

Navigation and Ancillary Information Facility



... but it does take a modest amount of effort to learn enough about SPICE to begin to use its features with good success.

It helps to have some math skills, some innate sense of spatial orientation, and some familiarity with your computer and its operating system, a code editor, and compiler or Integrated Development Environment (IDE).



SPICE is a Large Product

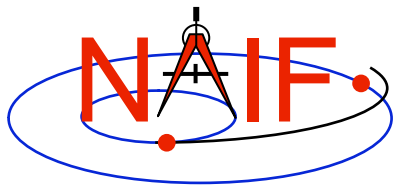
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The generic SPICE Toolkit contains:

- around 1000 individual public modules
 - » most customers use only a handful of these
- about 13 utility and application executables (with User Guides)
- about 23 subsystem reference documents
- 4 “cookbook” tutorial programs (with User Guides)
and assorted other documents, scripts and libraries.

Don't let that bother you...

... just work your way into it bit by bit.



The NAIF Team at JPL

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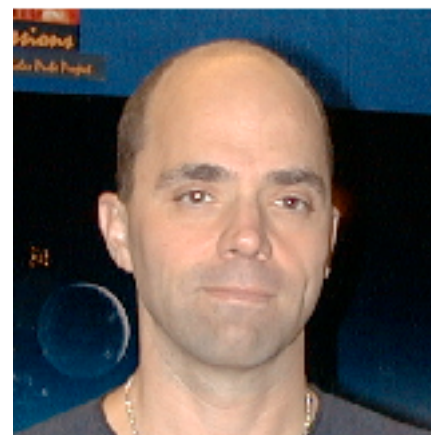
Chuck Acton



Nat Bachman



Boris Semenov



Ed Wright