Waves Summer School 2015

The Waves Group at NCEP/NOAA in partnership with the University System of Maryland Foundation will be offering a one-week Waves Workshop at the University of Maryland (UMD) College Park Campus, July 13 - 17, 2015. Topics covered will include wave dynamics and modeling, basics of the WAVEWATCH III® model, grid structures, numerics, oceanic, and nearshore applications. The workshop will consist of morning lectures and afternoon tutorials. See the Program schedule for details.

Registration for the Waves Summer School is $300, and will cover UMD administrative costs and IT support. There are 20 spots available and acceptance will be on a first-come, first-served basis. Parking is available in lots within walking distance at $15/day.

To register please go to

https://www.usmf.org/events/summer-wavewatch/

Additional information:

* There is no funding available from NCEP for covering participant costs.
* Deanna.Spindler@noaa.gov is the POC, please reply to her.
* Hard maximum of 20 participants due to computer lab facilities.
School Program

Monday July 13th
Morning session
8:00 - 9:00 --- Coffee, welcome, and course goals.
   Introduction by Dr. Carton (Chair, AOSC, UMD)
   and Dr. Tolman (Director, EMC/NCEP)
9:00 - 10:00 --- Intro to Phase averaged wave modeling
10:00 - 11:00 --- Pre compilation of WW3
11:00 - 12:00 --- Modular structure of WW3
12:00 - 13:00 --- Running the model single grid
13:00 - 14:00 --- Lunch Break
Afternoon session
14:00 - 17:30 --- Afternoon Tutorials
   Compiling and running the wave model for a single grid

Tuesday July 14th
Morning session
8:30 - 9:00 --- Arriving at UMD
9:00 - 10:00 --- Solving the action balance equation: source terms in WW3
10:00 - 11:00 --- Time stepping, limiters, adaptive time stepping
11:00 - 11:30 --- Garden sprinkler effects and alleviation
11:30 - 12:30 --- Parallel implementation of WW3
12:30 - 14:00 --- Lunch Break
Afternoon session
14:00 - 17:30 --- Afternoon tutorials
   Running the model with different source term switches

Wednesday July 15th
Morning session
8:30 - 9:00 --- Arriving at UMD
9:00 - 10:00 --- Multi grid operations in WW3
10:00 - 10:30 --- Grid reconciliation of similar grids
10:30 - 11:30 --- Different grid types and grid integration
11:30 - 12:30 --- Load balancing
12:30 - 14:00 --- Lunch Break
Afternoon session
14:00 - 17:30 --- Afternoon tutorials
   Grid generation tutorial using the gridgen package
Thursday July 16th

Morning session
8:30 -  9:00 --- Arriving at UMD
9:00 - 11:00 --- Unstructured grid formulation in WW3
11:00 - 12:00 --- Running WW3 with unstructured grids
12:00 - 13:30 --- Lunch Break

Afternoon session
13:30 - 17:30 --- Afternoon tutorial
   Running the model with unstructured grids

Friday July 17th

Morning session
8:30 -  9:00 --- Arriving at UMD
9:00 - 10:00 --- Regression testing
10:00 - 11:00 --- Model validation (data analysis do's and don'ts)
11:00 - 12:00 --- Partition and tracking
12:00 - 13:30 --- Lunch Break

Afternoon session
13:30 - 17:30 --- Afternoon tutorial
   Using regression testing package
   (last part of the afternoon will be reserved for answering questions about the course and clarifying doubts)