

Multidisciplinary Simulation, Estimation, and Assimilation Systems

Seminar Series

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VISIR (discoVerIng Safe and efflcient Routes)

for Ship Routing

Abstract: VISIR (discoVerIng Safe and efflcient Routes) is a fully open ship routing model. This is achieved through a GPL licensing of the source code and a detailed model documentation on open-access journals. This way, numerical optimization methods, hydrodynamic effects considered, approximations used, and their ranges of application are documented and made available to the scientific community. At the same time, VISIR model is employed in an operational system linked to the operational provision of oceanographic and weather forecasts. The system also includes customized PC and mobile interfaces for end-users. VISIR's main architectural choices, the input oceanographic and weather forecasts, and an outline of possible goals for a future community of VISIR developers and users are presented here.

Biography: Gianandrea's research activity aims to improve Maritime Transportation by means of Decision Support Systems. Together with colleagues of the TESSA and IONIO projects, he designed and implemented VISIR, a ship routing model for safer and more efficient navigation, and presently leads its scientific and operational development. As a model, VISIR's source code is made publicly available following the guidelines of the Free and Open Source Software. As an operational system, VISIR already has an operational implementation in the Mediterranean Sea.

Tuesday, Aug. 9, 2016

3:00PM; Rm. 5-234

Massachusetts Institute of Technology
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Cambridge, MA 02139

Host: Pierre Lermusiaux

<http://mseas.mit.edu>

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0.41
0.21
min 2

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A)

loss)

40

Chl.
Fcst.

Assimilation
Adap
Mode
led Estimates

Stoch.
Stoch. Coef. 4

Temp.
Fcst.

