

第4回 応用数学物理コロキウム

場所: 岐阜大学工学部 11番教室
日時: 2018年5月21日(月) 16:30 – 18:00

Predicting oceanic "freak waves" from first principles: what do we understand?

講演者: Prof. Victor Shrira

School of Computing and Mathematics, Keele University, UK

Wind waves in seas and oceans are inherently random. For many engineering applications it is vital to predict probability density function (PDF) of surface elevations along with the basis meteorological forecasting. Despite huge advances in engineering, anomalous or "freak" waves remain a major challenge for ships and offshore structures. Often for design it is legally required to know a priori the "100 year wave" or even the "1000 year wave". A brief overview of the main approaches towards quantifying the probability of freak waves and their shortcomings will be followed by a more focussed discussion of a mathematical model aimed at finding the wave height distribution for freak waves in transient sea states, i.e. sea states generated by special atmospheric conditions, e.g., rapid changes of wind, squalls, etc.

どなたでも参加できます。お気軽にご参加ください。

応用数学物理コロキウムの連絡先

岐阜大学工学部電気電子・情報工学科 応用物理コース

田中 (tanaka@gifu-u.ac.jp)、近藤 (skondo@gifu-u.ac.jp)、
小野 (shota_o@gifu-u.ac.jp)