



INFOMAT

Desember 2015

*GOD JUL
OG
GODT NYTT ÅR!*



INFOMAT kommer ut med 11 nummer i året og gis ut av Norsk Matematisk Forening. Deadline for neste utgave er alltid den 15. i neste måned. Stoff til INFOMAT sendes til

infomat at math.ntnu.no

Foreningen har hjemmeside <http://www.matematikkforeningen.no/INFOMAT>
Ansvarlig redaktør er Arne B. Sletsjøe, Universitetet i Oslo.

Matematisk kalender

2016:

Mars:

15. Abelprisen, offentliggjøring, Oslo

16.-20. 27. Nordic Congress of Mathematicians, Stockholm

Nye doktorgrader

Peder Aursand, NTNU, disputerte 4. desember 2015 med avhandlingen *Numerical solution of the dynamics of director fields in nematic liquid crystals*. Professor Helge Holden har vært hovedveileder og professor Nils Henrik Risebro biveileder.

Sammendrag:

The liquid crystal phase is an intermediate phase of matter between solid and liquid. The molecules in a nematic liquid crystal are free to flow, but their orientation is correlated. Nematic liquid crystals are famously used in modern computer and TV screens. Here, electric fields are used to manipulate the optical properties of a matrix of liquid crystals in order to produce the picture.

In my thesis work I studied variational wave equations describing the dynamics of the director field, which represents the average molecular orientation in a nematic liquid crystal. In particular, I developed robust, high-order numerical schemes for solving the equations of motion for the director field in special cases where modeling assumptions introduces mathematical difficulties. Furthermore, I looked at the application of multi-level Monte Carlo for efficient uncertainty quantification for stochastic PDE problems. For the stochastic variational wave equation in 1D and 2D a performance gain of 5-10 times could be observed when compared to regular Monte Carlo.

Ledige stillinger

PHD RESEARCH FELLOWSHIP IN MATHEMATICS

A position as PhD Research Fellow is available at the Department of Mathematics of the University of Oslo. If the successful candidate has a good command of one Scandinavian language, the fellowship will be for a period of 4 years, with 25 % compulsory work (teaching responsibilities at the Department). Otherwise the fellowship will be for a period of 3 years, with no compulsory work. Starting date no later than 01.06.2016.

The research fellow will be attached to the Section for Stochastic Analysis, Finance, Insurance and Risk, and be part of “Stochastics of Renewable Energy Markets (STORE)”. STORE is a 4-year project funded by the Faculty of Mathematics and Natural Sciences. The fellow will perform research within one or more of the work packages of STORE’s research plan found here. Applicants must hold a Master’s degree or equivalent in mathematics, with an excellent background in stochastic analysis. Application deadline: **20 January 2016**

INSTITUT MITTAG-LEFFLER POSTDOC FELLOWSHIPS, 2017

Institut Mittag-Leffler invites applications for several postdoctoral fellowships in connection with the Spring 2017 program *Algebro-Geometric and Homotopical Methods* organized by Eric M. Friedlander, Lars Hesselholt, and Paul Arne Østvær. The closing date for applications is **January 12, 2016**. For the official announcement, see: <http://www.mittag-leffler.se/research-programs/postdoctoral-fellowship-grants>

NYHETER

Nyheter

INSTITUT MITTAG-LEFFLER CELEBRATE ITS 100TH ANNIVERSARY ON MARCH 16, 2016.

The Institute was founded on the 16th of March 1916 by Professor Gösta Mittag-Leffler and his wife Signe, who donated their magnificent villa with its first-class library, for the purpose of creating the Institute that bears their name. It is the oldest Mathematics Research Institute in the world.

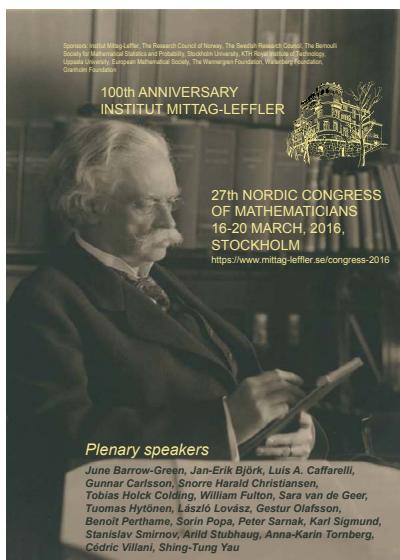
Related to this event we are planning to organise the 27th Nordic Congress of Mathematics in Stockholm on March 16-20, please see
<http://www.mittag-leffler.se/congress-2016>
<http://www.mittag-leffler.se/sites/default/files/Poster%2027th%20Nordic%20Congress%20A4.pdf>

The registration is open, see
<http://www.mittag-leffler.se/congress-2016/registration>

I would like to mention that the congress is free. We do not have any conference fee.

With best wishes,

Ari Laptev, Director Institut Mittag-Leffler



DATO FOR ICN 2018

ICM 2018, August 1-9, 2018, Rio Centro Convention Center, Rio de Janeiro, Brazil.

The General Assembly of the IMU will be held in São Paulo, on July 29-30, 2018.

It is possible to register for the newsletter on the website:

<http://www.icm2018.org/>

CALL FOR APPLICATIONS: 4TH HEIDELBERG LAUREATE FORUM, SEPTEMBER 18 - 23, 2016

Dear Laureates,

Dear Friends and Supporters of the Heidelberg Laureate Forum,

Preparations for the 4th HLF are in full swing and as of November 1, the online application tool for the young researchers will be up and running. The application deadline is **February 3, 2016**.

Please find below the press release of October 27, 2015, announcing the start of the application period for the 4th Heidelberg Laureate Forum (HLF). The HLF application poster and fact sheet are available for download at:
<http://www.heidelberg-laureate-forum.org/download-area/> [4]

We would greatly appreciate if you could help spread the word. To this effect, please feel free to forward the attached information to all interested parties.

Also, please remember to save the date for the 4th HLF: September 18-23, 2016!

Links:

[1] <mailto:ruth.wetzlar@heidelberg-laureate-forum.org>

[2] <mailto:beate.spiegel@klaus-tschora-stiftung.de>

[3] <mailto:Andreas.Reuter@h-its.org>

[4] <http://www.heidelberg-laureate-forum.org/download-area/>