

## INVITATION to the 2015 eVITA Winter School on Uncertainty Quantification for Physical Phenomena

The 2015 Winter School will take place from Sunday January 18<sup>th</sup> to Friday January 23<sup>rd</sup> at Dr. Holms Hotel, Geilo, Norway.

**Uncertainty Quantification for Physical Phenomena:** Many complex physical problems can be simulated using numerical discretizations and mathematical models of the underlying physical process. For many systems, such simulations are able to accurately capture future developments based on a complete description of the current physical state. Unfortunately, we typically do not have the complete state: we only see glimpses or derived quantities and have to create an estimate wherever we are missing data. We furthermore know that most measurements of a physical system will have inaccuracies and margins of error. With an inaccurate description of the initial state we will therefore expect inaccuracies in simulation results. The real question is then: how accurate are our results?

This year's winter school covers the topic of uncertainty quantification for simulation of physical phenomena. Uncertainty quantification aims to answer the questions "How accurate are the results?", and "Where are the most important uncertainties?", and the winter school will cover both intrusive and non-intrusive methods. We will learn from experts in the field on topics including multi-level Monte Carlo and ensemble simulations, polynomial chaos, and inverse problems.



Dr. Holms Hotel, Geilo

Attending the winter school is free, but participants must cover their own travel expenses and accommodation. More information can be found on the winter school webpages: <u>http://www.sintef.no/Projectweb/eVITA/Winter-Schools/2015/</u>

## Registration deadline: December 7th, 2014.

Register online at the eVITA web pages, <u>http://www.sintef.no/eVITA</u>. Participants are expected to stay at Dr. Holms Hotel, where we have reserved a limited number of rooms. *Please note: We only have a limited number of rooms, and the registration is binding after the deadline.* 

The eVita Winter School is sponsored by the Research Council of Norway project number 203376 (eVITA).