

Background

There has been increasing growth in the analysis and applications of the spectral (element) methods. The main characteristic of spectral (element) methods is the use of high-order polynomials as basis functions, as compared to low-order piecewise polynomials in a finite element method. The main advantage of the spectral methods lies on the fact that the convergence of numerical solutions is exponential if the exact solution is smooth. While the classical spectral methods are limited to simple geometries, the development of the spectral element method allows to take advantages of the geometric flexibility of finite elements and the high accuracy of spectral methods. Undoubtedly the spectral (element) methods have become a major computational tool, especially when highly accurate solutions are needed.

The aim of this series of workshops is to bring together experts working on spectral and high order methods and their applications to exchange recent progress and to promote future research and collaborations. This is the fifth workshop in the series on Spectral Methods and Their Applications, initially organized by Jie Shen (Purdue University & Xiamen University) and Chuanju Xu (Xiamen University).

- [The first workshop](#) in the series was held during June 14-16,2007 at Xiamen University.
- [The second workshop](#) in the series was held during May 29-31, 2008 in WuYi mountain.
- [The third workshop](#) was held on July 14-17, 2011 in Shanghai Normal University.
- [The fourth workshop](#) was held on November 2-4, 2013 in Xiamen University.

Organizing Committee

- [Zengji Du](#), Jiangsu Normal University
- [Benyu Guo](#), Shanghai Normal University
- [Jie Shen](#), Purdue University & Xiamen University
- [Chuanju Xu](#), Xiamen University
- [Chao Zhang](#), Jiangsu Normal University

Conference Location

- The workshop will take place at the Golden Morning Hotel.

Deadlines

- Submission of the title and abstract to zcxz1977@163.com: September 15, 2015

Contact information

Dr. Zhang Chao

Tel: +86(15162221026)

Email: zcxz1977@163.com

[School of Mathematics and Statistics](#)

Jiangsu Normal University

Xuzhou , 221116