

CURRICULUM VITAE

Ke Shi

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PERSONAL INFORMATIONS

Gender: Male
Date of birth: November 1st, 1983
Place of birth: Wuhan, P.R.China
Present Citizenship: Chinese
Visa Status: F1

RESEARCH INTERESTS

Hybridizable Discontinuous Galerkin Methods.
Finite element methods in Mechanics.
Numerical methods for conservation laws.

PUBLICATIONS

- [1] Hybridizable discontinuous Galerkin methods for Timoshenko beams, J. Sci. Comput. 44 (2010) no.1 pp. 1-37. with F. Celiker, B. Cockburn.
 - [2] A Projection-Based error analysis of HDG Methods for Timoshenko Beams, Math. Comp. 81 (2012), no. 277, 131-151. with F. Celiker, B. Cockburn.
 - [3] Conditions for superconvergence of HDG Methods for second-order elliptic problems, with B. Cockburn, W. Qiu. To appear in Math. Comp.
 - [4] Conditions for superconvergence of HDG Methods for Stokes equations, with B. Cockburn, To appear in Math. Comp.
 - [5] Superconvergent HDG methods on isoparametric elements for second-order elliptic problems, with B. Cockburn, W. Qiu, submitted.
 - [6] The devising of superconvergent HDG methods for linear elasticity with weak stress symmetry, with B. Cockburn, submitted.
 - [7] Hybridizable discontinuous Galerkin methods for biharmonic problems, with F. Celiker, B. Cockburn, in preparation.
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INVITED PRESENTATIONS

- [1] Conditions for superconvergence of HDG methods for diffusion equation. The 7th International Congress on Industrial and Applied Mathematics, Vancouver, Canada. July 18 - 22, 2011.
- [2] HDG methods for diffusion and Stokes equation. The 7th International Congress on Industrial and Applied Mathematics, Minneapolis, United States. July 24-28, 2011.
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EDUCATION

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| 2006–present | Ph.D in Applied Mathematics at University of Minnesota, expected 2012; Adviser: Bernardo Cockburn. |
| 2006-2009 | Master in Applied Mathematics at University of Minnesota; Adviser: Bernardo Cockburn; Thesis: HDG Locking-Free Methods for Timoshenko Beams. |
| 2002-2006 | BS in Mathematics at Peking University, Beijing, China. |
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WORKING EXPERIENCE

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| 2006-present | Teaching Assistant in Math Department, University of Minnesota. |
| 2004-2005 | Vice Director of Practice Division of Student Union, School of Mathematical Sciences, Peking University, Beijing, China. |
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AWARDS

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| 2002 | Freshman Fellowship with honor, Peking University, Beijing, China. |
| 2001 | Chinese Mathematics Olympiad, Silver Medal, Hongkong, China. |
| 2001 | National Mathematics Olympiad Competition, First Place, China. |
| 2001 | Bulgarian International Mathematics Olympiad Competition, Silver Medal, Sofia, Bulgaria. |
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COMPUTER AND LANGUAGE SKILLS

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| Programming | Matlab, Fortran. |
| Office Softwares | MS Excel, MS Word, MS Powerpoint, Latex, Beamer. |
| Languages | Chinese, English. |