David John Kennett

Address	Flat 10	**Date of Birth**	24th December 1986
	The Reach	**Nationality**	British
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Aeronautical Researcher Specialised in Computational Fluid Dynamics

Current Position

PhD Computational Fluid Dynamics **July 2009 – Present**
University of Liverpool
Thesis Title:

A Semi-Meshless Solver for CFD Simulations with Moving Geometries

- Aim of the project is to simulate unsteady flows for applications with moving geometries, namely store release using CFD.
- A *meshless method* has been developed and implemented for flow simulations.
- A *stencil selection method* is under development.
- Research supported by the EPSRC and BAE SYSTEMS.
- Studentship includes work placements at the Advanced Technology Centre at BAE Filton.

Education

MMath (Hons) in Mathematical Physics: **Sept 2005 – May 2009**
University of Liverpool : *Grade First*

- **Topics included**: 'Advanced Quantum Mechanics', 'Linear Differential Operators in Mathematical Physics', 'Linear Algebra', 'Partial Differential Equations', 'Relativity', 'Electromagnetism', 'Statistical and Low Temperature Physics', 'Cartesian Tensors and Mathematical Models of Solids and Viscous Fluids', 'Variational Calculus and Homogenization Theory'.
- **Final year essay:** The Functional Approach to Quantum Field Theory.

St Margaret's C of E High School **Sept 1998 – June 2005**

- **A–Level:** Mathematics (A), Physics (A), Chemistry (B), General Studies (C)
- **AS–Level:** French (B)
- **GCSE:** 11 subjects grade A*–B

Additional Skills

Computer

- **Computational Fluid Dynamics:** PML (proficient), PMB (proficient), ICEM (basic knowledge), Tecplot360 (intermediate)
- **Mathematical Software:** Matlab (good knowledge), Maple (basic knowledge)
- **Programming:** C (good knowledge)
- **Systems:** Windows, Linux/Unix
- **Office Tools:** Microsoft Office, LaTeX2e, Open Office.

Languages

- **French:** A* GCSE level, B AS level (Writing A, Reading A, Listening A, Speaking C)

Publications

Conference Proceedings:

- D.J. Kennett, S. Timme, J. Angulo, K.J. Badcock, "An Implicit Semi-Meshless Scheme with Stencil Selection for Anisotropic Point Distributions", *AIAA Paper 2011-3234. Presented at the 20th AIAA Computational Fluid Dynamics Conference June 27-30*, 2011.

Interests and Activities

- Watching and playing cricket.
- Playing the guitar, classical and electric.
- Military history.

References

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