



## **Dr. Sergey Karabasov**

### **Professional & Research Experience**

2016 - Director of GPU-Prime, a small computational engineering consultancy company, Cambridge

2015 - Reader in Computational Modelling, Queen Mary University of London

2012-2015 Senior Lecturer in Modelling and Simulation, Queen Mary University of London

2005-2012 Royal Society University Research Fellow, Cambridge University Engineering Department

2000-2005 Postdoctoral Research Associate, Cambridge University Engineering Department

### **Education**

2010 – Doctor of Science Habilitation Degree, Keldysh Institute of Applied Mathematics, Moscow

1999 – PhD in Mathematical Modelling, Lomonosov Moscow State University

1989-1995 – MSc in Physics and Applied Mathematics, Moscow Institute of Physics and Technology

### **Summary**

Dr Karabasov's interests are in unsteady fluid dynamics. His work typically combines high-resolution methods (large-eddy simulations, numerical schemes, high-performance computing) with model decomposition approaches (acoustic analogy, integral surface methods, vortex sound theory). In aeroacoustics his interests are in high-speed jet noise (mixing noise, shock associated noise, and installation noise), trailing edge noise, and rotating machinery noise (helicopter noise, wind turbine noise, and UAV noise).

In addition to aeroacoustics his other interests include computational geophysics (ocean dynamics modelling) and hybrid all-atom molecular dynamics/continuum mechanics schemes (multi-resolution modelling of chemical processes under flow effects).

<https://www.sems.qmul.ac.uk/staff/s.karabasov>