## PhD Studentships – In Advanced Multi-Physics simulation and validation.

We are recruiting four PhD students to add to our current team of 5 post-docs and 4 PhD students working on a large research project running in collaboration with Jaguar Land Rover. The overall objective of the activity is to develop new simulation capabilities for use in the automotive product development process. The work at Loughborough is part of a large programme involving other departments at Loughborough and Cambridge, Leeds and Warwick Universities.

The package of work in Aeronautical and Automotive Engineering at Loughborough is in *Multi-Physics & Multi-Functional Simulation Methods*. The following four PhD projects are available:

- Modelling (CFD) and experimental aerodynamics of surface contamination in order to predict obscuration of mirrors, windows and cameras (2 PhDs)
- Modelling of Automotive Noise and Vibration.
- Automated Model Order Reduction to automatically take complex models (e.g. handling/CFD) and reduce them to simple models that represent the essential physics and behaviour.

Further details of the individual PhD projects can be found at <a href="http://www.lboro.ac.uk/departments/aae/research/researchopportunities/phdstudentships">http://www.lboro.ac.uk/departments/aae/research/researchopportunities/phdstudentships</a> automotive/

Successful candidates will be expected to work closely with the Industrial partners and to make presentations to the wider programme at review meetings and workshops. There will also be opportunities to spend time at the industrial partner's facilities and to travel to International conferences and seminars.

Applications are open to EU and UK nationals. Candidates must be expecting, or have already obtained, a first degree (1<sup>st</sup> class, 2:1 honours or equivalent) in engineering, physics or mathematical sciences. Good communication skills are essential.

The preferred starting dates for the projects is July 2014 although we will consider later starts up to October 2014. The package includes funding for tuition fees plus a bursary of £16,000 per annum tax free for 3.5 years. The project also has generous funding for computers, lab equipment and travel, including attendance at international conferences.

Applications can be directed through the university website at <a href="http://www.lboro.ac.uk/study/postgraduate/howtoapply/">http://www.lboro.ac.uk/study/postgraduate/howtoapply/</a>. The closing date for applications is 7<sup>th</sup> March 2014.

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Details of the Department of Aeronautical and Automotive Engineering can be found at: <a href="http://www.lboro.ac.uk/departments/aae/">http://www.lboro.ac.uk/departments/aae/</a>