DRIVEN

Newsletter No 1

July 2019

Dear Readers,

We are really proud to present the first issue of our DRIVEN newsletter with the latest information and news regarding our project activities and early results obtained so far.

The DRIVEN project aims at boosting the University of Luxembourg and its twinning partners' scientific excellence and innovation capacity in data-driven simulation as well as implementing a research and innovation strategy focusing on three sub-topics:

- *Mathematical foundations for data-driven simulations*
- *Data-driven simulations for computer-assisted therapy*
- *Data-driven simulations for functional composite materials*

During the three-year project, the consortium partners will collaborate on various activities from short-term staff exchanges to the organisation of training events and participation to scientific conferences. Please, visit our DRIVEN website to be informed of the latest news and forthcoming events.

DRIVEN Team

The DRIVEN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 81199.

DRIVEN Consortium

The DRIVEN project is composed of four excellent research institutions in the field of data-driven simulation.

The Computational Sciences interdisciplinary group at UL is composed of members from different research units and disciplines as diverse as Earth Sciences, Life Sciences, Physics, Mathematics and engineering, with the common goal to set up a network among application-driven scientists which can provide interdisciplinary expertise in the field.

Inria is the only French public research body fully dedicated to computational sciences. MIMESIS research team at Inria focuses on creating a synergy between clinicians and scientists in order to develop new technologies and approaches in the context of advanced simulation for training.

The Bernal Institute at ULIM has state-of-the-art composites manufacturing laboratory and host the Irish Composites Centre (ICOMP). Material sciences and technologies, and especially for composite materials, require data-driven simulation at every level from the material modeling and manufacturing to the analysis of structural mechanics.

The ***University of Texas at Austin*** is ranked amongst the biggest and best research universities in the USA. The Institute for Computational Engineering and Sciences is an interdisciplinary research unit and graduate dedicated to the advancing computational science and engineering.

Presentation of the project

The DRIVEN project has been funded under the 'Spreading Excellence and Widening' section of the Horizon 2020 Programme.

The ***Twinning*** scheme aims to increase scientific excellence of a research institution located in a low-performing country in research (e.g. Luxembourg) by developing links with internationally-leading counterparts. The University of Luxembourg and its twinning counterparts will exchange knowledge on data-driven simulation and increase their research and innovation capacity in the three research topics via different project activities :

Staff Exchanges

- Short-term travels from 1 week to 2 months from/to UL.
- Exchange of knowledge relevant to the 3 research topics.

Training

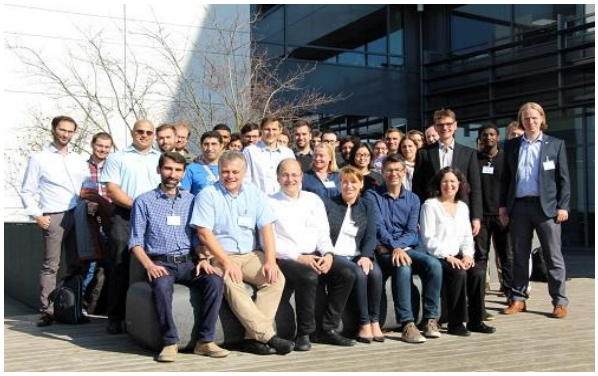
- Organisation of 6 training workshops, 3 summer schools and 1 international conference.
- Participation to data-driven simulation scientific events.

Promotion and Dissemination

- Promotion of DRIVEN project and data-driven simulation to the general public.
- Dissemination of project results to the scientific and industrial communities.

H2020 DRIVEN Kick-off Meeting

The University of Luxembourg organise the DRIVEN kick-off meeting on the 15th of October 2018 at their premises in Esch sur Alzette (Luxembourg).



The kick-off meeting gathered participants from all the faculties and research centres of the University of Luxembourg as well as from the government and industries. Key stakeholders in Luxembourg attended the event and gave a talk during the DRIVEN kick-off meeting showing a real interest in our project and its expected results.

Amongst them we can mention the Rector of the university, the Vice-Rector for Research, the Dean of the Faculty of Science, Technology and Communication (FSTC) and a representative from the Directorate for research and innovation at the Ministry of the Economy.

1st DRIVEN workshop in Luxembourg

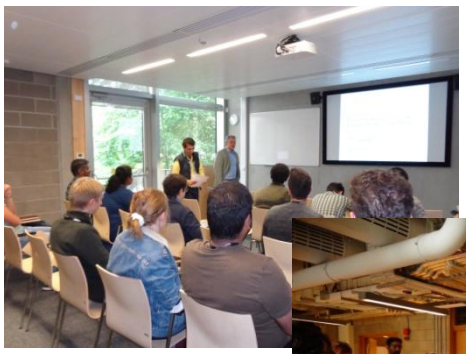
On 12-13 February 2019, the University of Luxembourg organised the first H2020 DRIVEN workshop on Belval campus. For this first edition, Prof. Stéphane Bordas, as coordinator of the project, decided to scale-up the format to two days and invited numerous speakers from the twinning partnering organisations as well as local industrial actors (e.g. Goodyear, CENAERO, E-Xstream, CERATIZIT, Sparc Industries and ROTAREX) and external academics (e.g. Czech Technical University and ETH Zurich).

First DRIVEN Summer School in Limerick

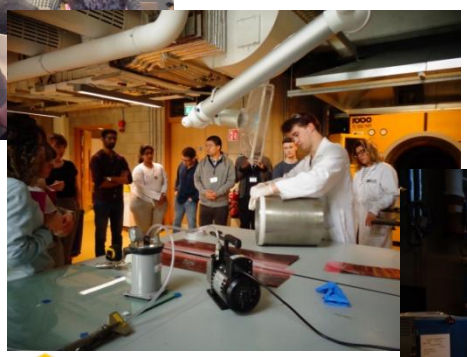
In the framework of DRIVEN project, the consortium partners must organise a total of three summer schools dedicated to students in the field of data-driven simulation over the three-year project.

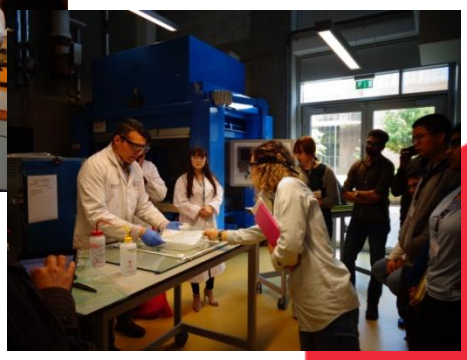
During the kick-off meeting, it was decided that the University of Limerick (ULIM, Ireland) would organise the first edition of the DRIVEN summer school, while Inria (France) will organise the second edition and the University of Luxembourg the final one.

ULIM organised the first DRIVEN summer school the 17-21 June 2019 at their premises and attracted 20 participants from ULIM and UL but also external participants from TU Delft (NL), University of Bristol (UK), Polytech' Lille (FR), IMT Mines Albi (FR) and Rice University (USA). The programme consisted in tailor-made lectures on data-driven simulation for composite materials together with practical exercises and case studies.



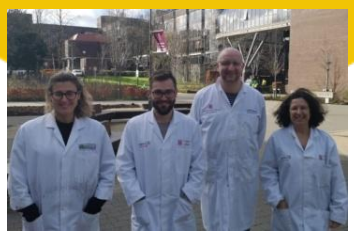
Bernal Institute

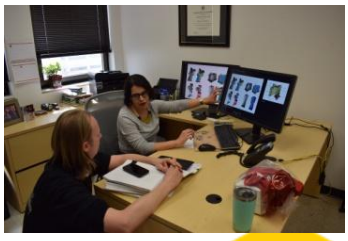




Latest news

- Staff exchanges between UL and its twinning partners ULIM, Inria and UT Austin are taking place and good outcomes are expected. More details are available on the project website.
- The second project workshop will be organised in Luxembourg on the 11-12 September 2019. More information will be published soon on the project website
- Do not get mixed up with the doctoral Training Unit project DRIVEN funded by the Fond National de la Recherche in Luxembourg and learn more about this sister project of the University of Luxembourg on the DRIVEN-DTU website.





DRIVEN
DTU

Learn more on our DRIVEN project activities and achievements by visiting frequently our website:

2020driven.uni.lu

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