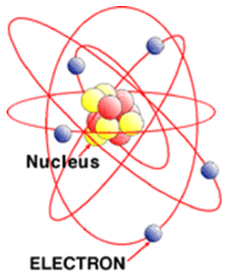

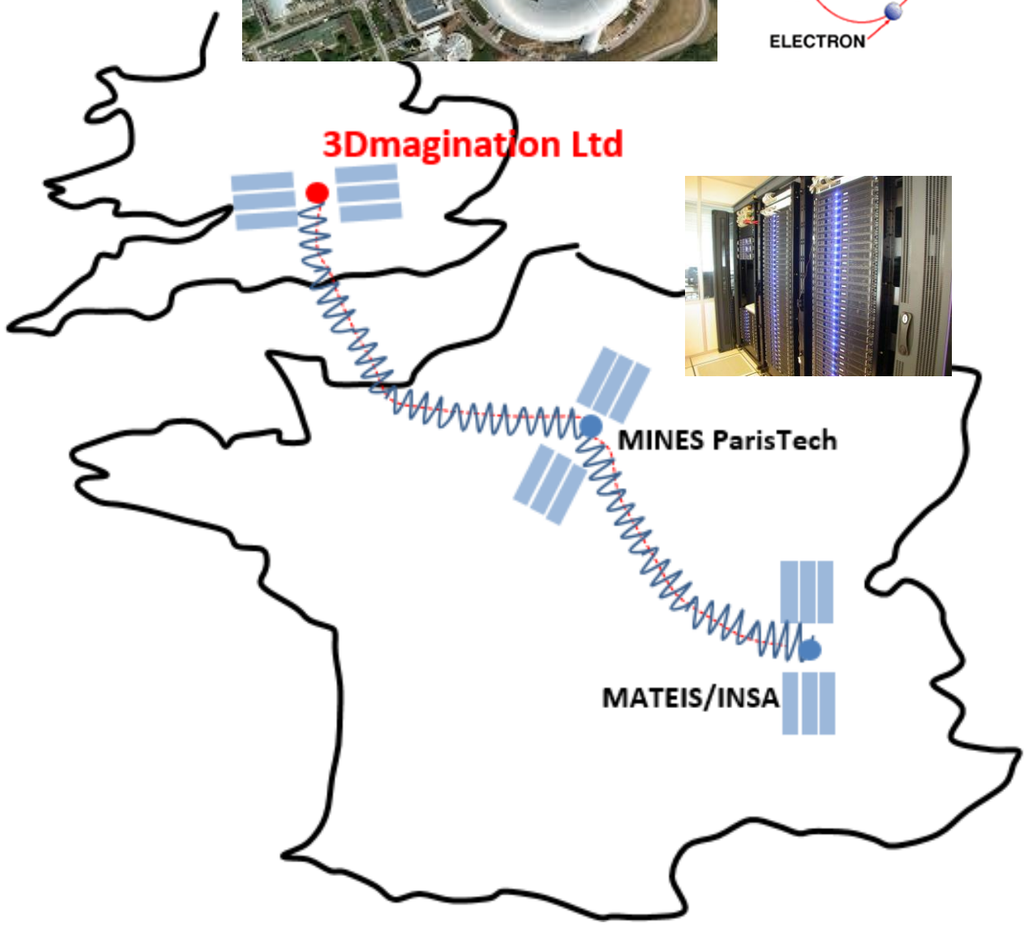

Join us on our journey
contact us to discuss your needs or book a training today.

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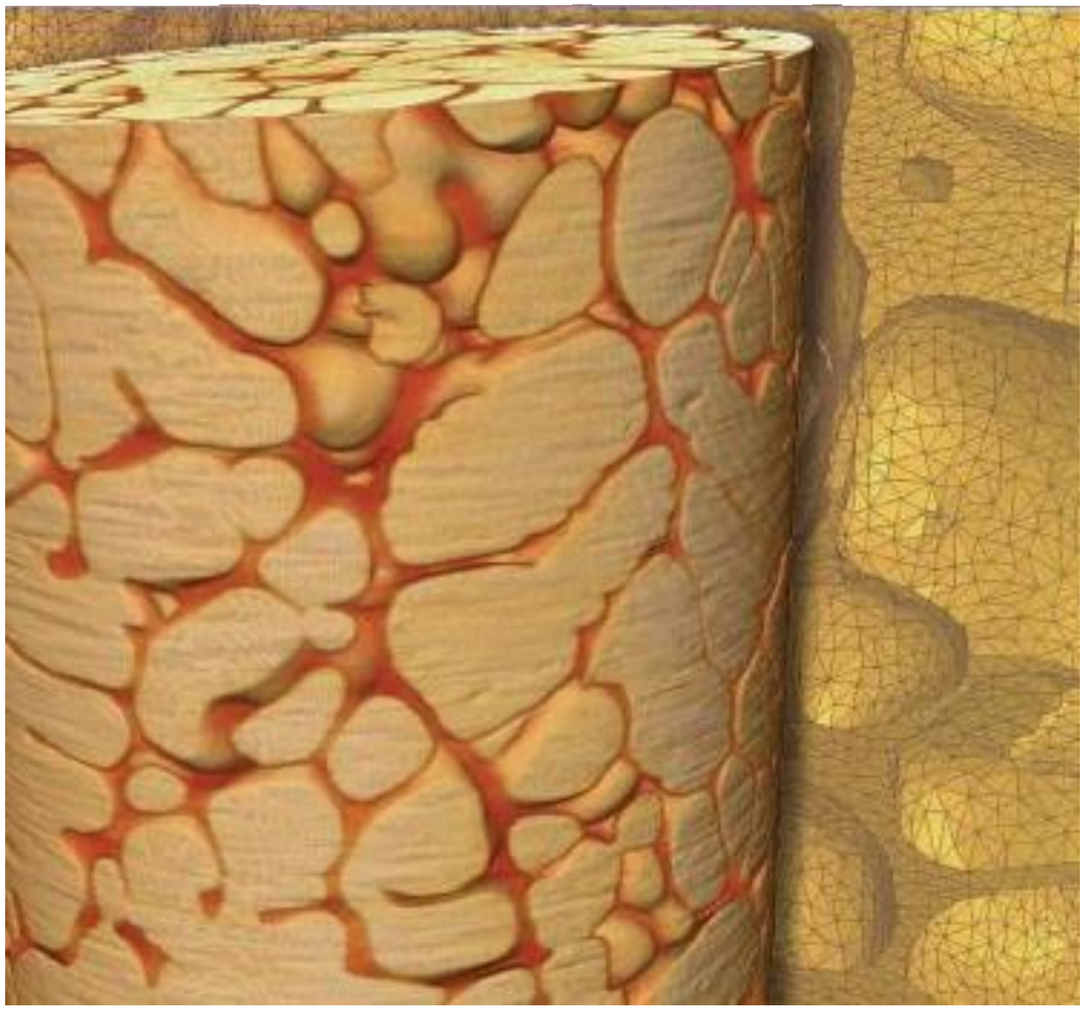
3Dmagination
"Imaging beyond imagination"

Imaging - Quantifying - Testing - Modelling

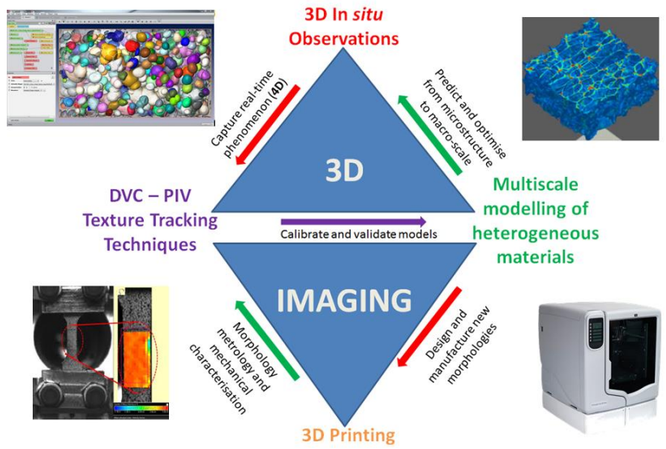


Driven by the technological and computational progress, X-ray computed tomography is continuously growing. Yet, a lot remains to be done to solve all the technical problems when more constraints are put on the technique. To face these challenges, 3Dmagination offers advanced training and services in 3D/4D imaging to academics and companies willing to take the lead in their research and business.

3D imaging solutions
For Business Success

We have allocated slots to state-of-the-art laboratory scanners and synchrotron-based tomography imaging from the nano- to the macro-scale, equipped with a range of in situ rigs to capture dynamic processes in service or during manufacturing processes. We advise you on the best imaging platform and offer a full, fast scientific

In todays's fast-paced business environment, companies are constantly pressured to adapt to changing market conditions. Our multidisciplinary expertise and integrated workflow solution, from imaging to quantifying, testing and modelling, allows us to find a full, fast solution adapted to you needs and/or solve a technical challenge.



"We advise you on the best imaging platform and offer a full, fast scientific analysis (sample preparation, 4D scanning, data storage, data processing, technical report)."

3D imaging courses
For Sustainable Development

Course 1

Imaging and in situ testing: overview of the whole imaging chain with guidelines to produce images of good quality and choices to be made when imaging dynamic processes.

Course 2

3D visualization, quantification and scripting: 3D segmentation, full quantification and visualisation of tomographic data (defects, porosity, connectivity, orientation, isotropy, etc.) and the impact of imaging noise and artefacts.

Course 3

Digital Volume Correlation: importance of imaging noise and texture when using this technique, guidelines on how to perform a DVC analysis, analysis and visualisation of the data in a sophisticated way, development of micro-FE models with realistic boundary conditions.

Course 4

3D Digital-based microstructural modelling: 3D segmentation, 3D meshing, boundary conditions, material behavior. Full micro-FE analysis using real-world (CT data) and virtual data (random morphological models). Notion of Representative Volume Element (RVE), material parameters identification using optimization package.

"As STEM ambassadors, we are dedicated to inspiring the next generation of young scientists by showing them inspiring practical applications of the way science can impact our economy and society."

EES National Award working with Wycombe Abbey School

"When we met with our mentors we learned a great deal from not only their lectures and presentations, but also just from observing how they tackle problems and what sort of work they do as engineers on a daily basis."

Sadhbha Odufuwa-Bloger