3 PhD and 3 Postdoc positions on Exploring Duality for Future Data-driven Modelling, KU Leuven, Belgium

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PhD and Postdoc positions KU Leuven (ERC Advanced grant E-DUALITY)

The research group KU Leuven ESAT-STADIUS is currently offering 3 PhD and 3 Postdoc (1 year, extendable) positions within the framework of the ERC (European Research Council) Advanced Grant E-DUALITY <u>http://www.esat.kuleuven.be/stadius/E</u> (PI: Johan Suykens) on Exploring Duality for Future Data-driven Modelling.

Within this ERC project E-DUALITY we aim at realizing a powerful and unifying framework (including e.g. kernel methods, support vector machines, deep learning, multilayer networks, tensor-based models and others) for handling different system complexity levels, obtaining optimal model representations and designing efficient algorithms.

The research positions relate to the following possible topics:

- -1- Duality principles
- -2- Multiple data sources and coupling schemes
- -3- Manifold learning and semi-supervised schemes
- -4- Optimal prediction schemes
- -5- Scalability, on-line updating, interpretation and visualization
- -6- Mathematical foundations
- -7- Matching model to system characteristics

For further information and on-line applying, see <u>https://www.kuleuven.be/personeel/jobsite/jobs/54681979</u>" (PhD positions) and <u>https://www.kuleuven.be/personeel/jobsite/jobs/54681807</u>" (Postdoc positions) (click EN for English version).

The research group ESAT-STADIUS <u>http://www.esat.kuleuven.be/stadius</u> at the university KU Leuven Belgium provides an excellent research environment being active in the broad area of mathematical engineering, including data-driven modelling, neural networks and machine learning, nonlinear systems and complex networks, optimization, systems and control, signal processing, bioinformatics and biomedicine.