The core features of POEMA

POEMA's scientific objectives are:

New advances in the analysis and in the understanding of the algebra and geometry involved in **polynomial optimization problems**, which lead to significant progress in the development of new efficient algorithms and implementations for solving global optimization problems

New, alternative methods for **solving global optimization problems**, exploiting the structure of the problems for **efficiency and accuracy**. An **industrial breakthrough** should be a new class of optimisation software that can solve real life global optimisation problems.

Developing the scope of applications of this **new paradigm** by addressing **challenging applications** and optimization bottlenecks in physics, information processing, communication, economy, energy management, etc. opening **new innovation perspectives**, and providing, to young talented scientists, the keys to build a strong professional future in these demanding research and industrial areas.

The POEMA consortium

The consortium consists of project partners from Italy, France, Germany, Ireland, Norway, the Netherlands, and the United Kingdom.

Technical/scientific coordination:
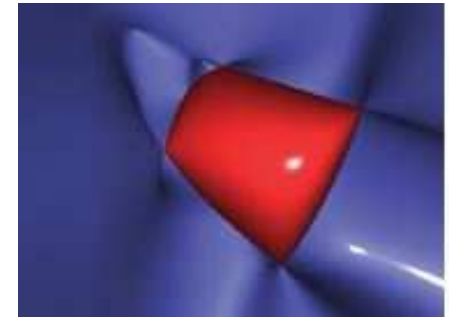
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More information at:

http://poema-network.eu/

Follow us on Twitter @POEMA_H2020

Polynomial Optimization, Efficiency through Moments and Algebra (POEMA)

POEMA

What are the training objectives of POEMA?

The overall training goal of the network POEMA is to provide a group of young scientists with an inherent interdisciplinary training in polynomial optimization and with inter-sectorial experience. More precisely, the objectives are:

- To define a curriculum for research-led training at the PhD level that offers a variety of technical and complementary approaches including computer algebra, real algebraic geometry, and numerical analysis.

- To provide the Phd fellows with the opportunity for career developments and to expose him/her with multi-sectorial domains.

- To educate a group of top-level scientists experts, who will form the basis for a network of people in Polynomial Optimization.

- To develop the cooperation between academia and industrial partners as well as between all partners, from which the Phd fellows will benefit.

POEMA aims at building up a public training program with experts from different scientific domains and organisations: research laboratories, universities, and industrial partners.

The host institutions, targeted student secondments and schools in the network will offer additional public training. The cooperation between the research centres, the universities and industrial partners offers a unique opportunity for the fellows career development and also provide concrete structural collaboration between the partners beyond the duration of the project.

Come and join POEMA 's next events:

- 1st workshop: 15-17 Jan 2020, Florence, Italy

- 1st learning week & 2nd workshop: 23 March – 3 April 2020, Konstanz, Germany

- 3rd workshop: January 2021, Sophia Antipolis, France

- 2nd learning week: April 2021, Toulouse, France

- Industrial workshop: August 2021, Birmingham, United Kingdom

- 4th workshop and doctoral day: January 2022, Tilburg, the Netherlands

- Final workshop: October 2022, Paris, France

Information of these events will be provided on POEMA website