Open doctoral and postdoctoral positions for the **COLORAMAP** project funded by the **ERC** and the **FNRS** and entitled **Constrained Low-Rank Matrix Approximations - Theoretical and Algorithmic Developments for Practitioners**.

The research group of Nicolas Gillis at the University of Mons (Belgium) is seeking highly qualified candidates for one doctoral and one postdoctoral position funded by the ERC (European Research Council), and one doctoral and one postdoctoral position funded by the FNRS (funds for scientific research in Belgium).

This project focuses on the theory, algorithms and applications of low-dimensional representations of high-dimensional data based on low-rank matrix approximations; see [https://sites.google.com/site/nicolasgillis/coloramap/overview](https://sites.google.com/site/nicolasgillis/coloramap/overview) for a description of the project and the objectives. The successful candidate will have the flexibility to choose a topic within the range of this project.

**Your profile** is a MSc/PhD in applied mathematics, mathematics, computer science, or a related discipline. You must have an expertise in at least one of these fields: optimization, computational complexity, numerical linear algebra, data mining and machine learning, hyperspectral imaging. You should have excellent programming skills in a numerical language (such as Matlab), and good communications skills, both written and oral, in English.

**We offer:**
- A research team constituted of one professor, one postdoctoral researcher (Arnaud Vandaele), and four more members to be hired (two postdocs and two PhD students).
- Travel expenses for conferences, with the possibility for a short stay abroad. Computing resources (a laptop).
- For the ERC funded positions, a 12-month contract that can be extended (the project lasts until 2021). These positions start the 1st of September 2016.
- For the FNRS funded positions, a 24-month contract. These positions start as soon as possible and should start before July 1st 2016.

**To apply:** applicants are requested to send a detailed CV, a list of publications (if applicable), and
- for the PhD students: a brief statement of research interests.
- for the Postdocs: a 2-page research statement explaining also why the candidate is interested in working in the research topics described above and how it is connected to his/her PhD background.

This material (in pdf), together with the contact of two persons of reference that can be contacted, shall be sent to **erc.coloramap@gmail.com**. Don’t hesitate to contact me at the same address if you have any questions about the positions.

**Candidate Selection:**
- Pre-selection of candidates based on their application files.
- (remote) Interview of the short-listed candidates.

Applications are collected until April 1st 2016, last limit to have full consideration. The positions remain open until they are filled.