PhD Position on "Deterministic and stochastic optimization for coupled matrix and tensor decompositions; Application to multi-dimensional signal processing and large size inverse problems in image processing" at the University of Toulon, France

PhD title: "Deterministic and stochastic optimization for coupled matrix and tensor decompositions. Application to multi-dimensional signal processing and large size inverse problems in image processing"

Keywords: Multi-dimensional data analysis, coupled matrix/tensor factorization algorithms, nonlinear optimization, constrained optimization (non-negativity, sparsity), stochastic algorithms, (Canonical) Polyadic decompositions (CanDecomp, Parafac) CP, Tucker, parallelization, distributed computing.

Practical informations The PhD will take place in the LIS laboratory, UMR CNRS 7020 (SeaTech School of Engineering, University of Toulon in the South of France, Toulon, France)

The advisors are: Nadège Thirion-Moreau: Full Professor, Laboratoire LIS, UMR CNRS 7020, Equipe SIIM, Tél: 04.94.14.24.56, email: <u>thirion@univ-tln.fr</u> Cyril Prissette: Assistant Professor Candidate profile: Applicants should be at graduate level (Master degree or equivalent engineering degree). They should have skills in at least one of the following topics: optimization, signal and image processing, scientific computing and computer sciences.

The PhD will start on September or October 2018. The PhD grant is from the French Minister of Higher Education and Research (ED 548, Sea and Sciences). The net income is fixed at 1367,80 euros per month for 36 months. During the second year, possibility of an amendment to apply for teaching activities.

For further information or to apply, please contact the PhD advisors or send them a detailed CV, a copy of the last obtained diploma and a copy of the marks.

Application deadline: june 21 2018