Opening of a postdoctoral position with Prof. Marco Mondelli at the Institute of Science and Technology (IST) Austria

We are at the center of a revolution in information technology, with data being the most valuable commodity. Exploiting this exploding number of data sets requires to address complex inference problems, and our group works to develop mathematically principled solutions. In particular, in machine learning, given a model for the observations, the goal is to understand how many samples convey sufficient information to perform a certain task and what are the optimal ways to utilize such samples. Both the vision and the toolkit adopted by our group are inspired by information theory, which leads to the investigation of the following fundamental questions: What is the minimal amount of information necessary to solve an assigned inference problem? Given this minimal amount of information, is it possible to design a low-complexity algorithm? What are the fundamental trade-offs between the parameters at play (e.g., dimensionality of the problem, size of the data sample, complexity)?

We are looking for a **postdoctoral scholar** to join the team. A PhD in computer science, electrical engineering, applied mathematics or a related field is required, as well as strong analytical skills. We offer a **two-year** postdoctoral contract in the group led by **Prof. Marco Mondelli** (http://marcomondelli.com) at the **Institute of Science and Technology (IST), Austria**. The position is funded by the **2019 Lopez-Loreta Award** and its focus is on theoretical foundations of deep learning and non-convex optimization in high dimensions. The starting date is flexible.

IST Austria (https://ist.ac.at) is a young, public research institution with an integrated PhD-granting graduate school, located in Klosterneuburg on the outskirts of Vienna. It is dedicated to basic research and is committed to becoming a world-class research center offering an international, state-of-the-art environment for scientists of the natural sciences, mathematics, and computer science. By actively promoting cross-disciplinary collaborations, IST Austria aims at breaking down the traditional boundaries between disciplines. At IST Austria, diversity and inclusion are core values, and scientists are brought together from all over the world, with English being the working language.

Interested candidates are invited to send their questions to `marco.mondelli@ist.ac.at`. The application should contain a CV, a publication list and a research statement. Reference letters will be requested at a later stage.