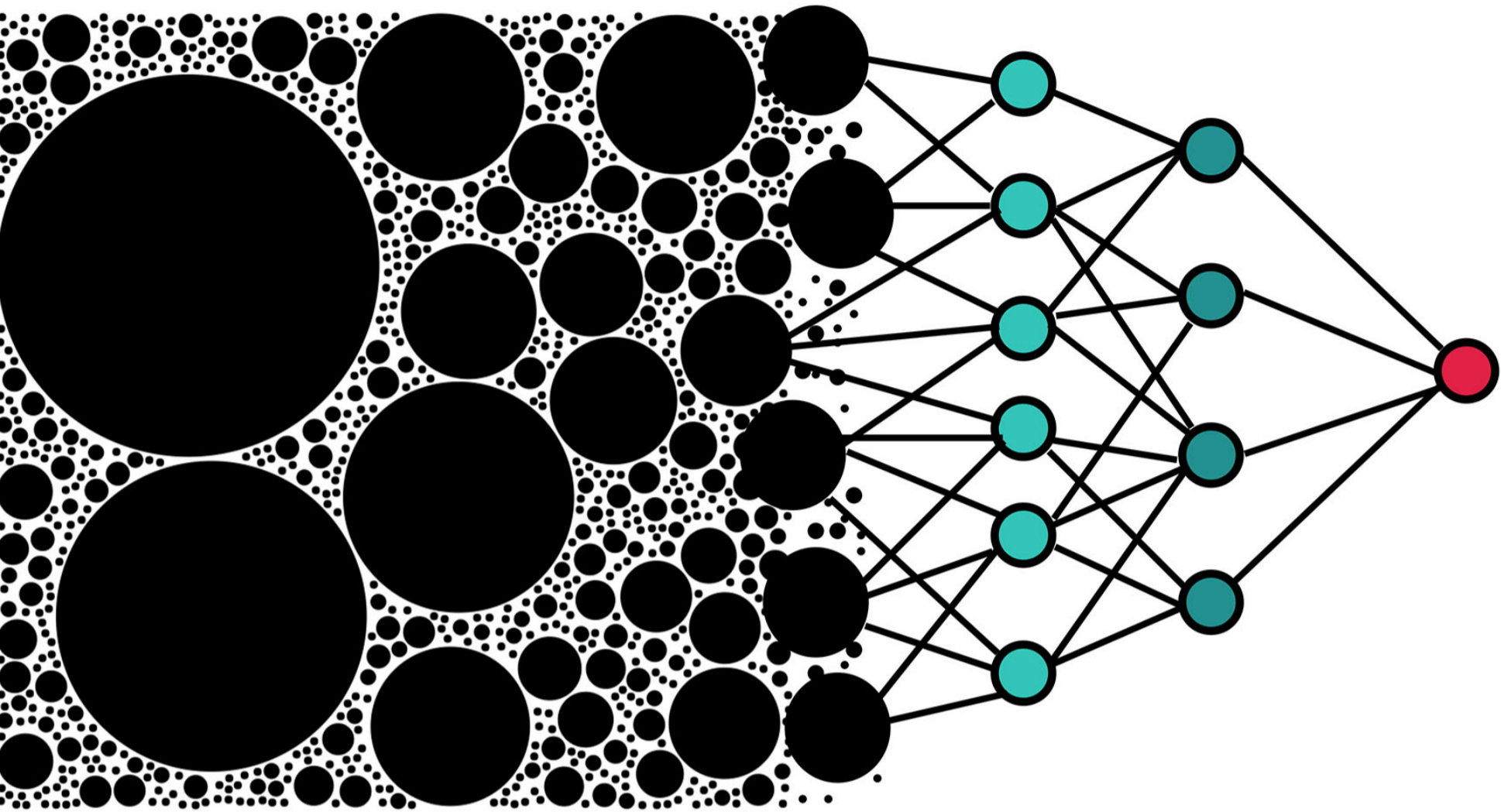


# PHYSICS COLLOQUIA 2022/2023



Marc Mézard | Università Bocconi Milan (ITA)  
**COMPLEX SYSTEMS WITH STRUCTURED DISORDER.**

ore 14:30 | AULA A | VIA CELORIA 16 MILANO

**APR 18**  
**2023**

In the last fifty years, the construction of a new branch of statistical physics dealing with strongly disordered systems has found many applications in various fields, from computer science to information theory and biology. Four main obstacles were overcome to develop a coherent theory: handle a statistical ensemble of samples, analyze quantitatively the microscopic disorder, explore complex energy landscapes, understand their link to dynamical behaviors. This talk will describe some of these achievements, and argue that the present biggest challenge, motivated in particular by machine learning theory, is a much better understanding of complex systems with structured disorder.



UNIVERSITÀ DEGLI STUDI DI MILANO  
DOTTORATO DI RICERCA IN FISICA  
ASTROFISICA E FISICA APPLICATA

**DIPARTIMENTO DI FISICA**  
via Celoria 16 | 20133 MILANO  
Tel. +39 02 50317740  
<http://phd.fisica.unimi.it> | [phd@fisica.unimi.it](mailto:phd@fisica.unimi.it)