



European Research Council
Established by the European Commission

Università di Roma Tor Vergata
Dipartimento di Fisica



Post-doc research position profile: 'Data Scientist in Fluid Dynamics'

Dept. of Physics University of Rome 'Tor Vergata', Italy

@Group of Complex Flows and Complex Fluids. PI Prof. Luca Biferale

We are searching for a young data-scientist interested to be embedded for a 2-year position in the group of Complex Flows and Complex Fluids (PI [Prof. Luca Biferale](#)). The position is meant for an early career researcher/engineer with a PhD. The candidate will work within the projects funded by ERC ([Smart-TURB](#)) and by the Italian Ministry of Research (MUR-Fare). The main activity will be devoted to the creation, management, and optimization of a novel database for machine learning applications in fluid dynamics and turbulence studies ([Smart-TURB portal](#)), including the responsibility of managing an infrastructure for web/Internet-based database sharing.

Preferred selection criteria:

- Knowledge of machine learning technologies for automated data classification and data generation
- Basic skills in physics and statistics for data analysis on parallel computers.
- Familiarity with software technologies for data publishing on the Internet, management of Linux web servers, and network infrastructure issues related to serving large quantities of data
- Basic understanding of parallel file formats, with a focus on applications of machine learning, data presentation, research, classification, real-time 3D visualization
- Familiarity with standard tools used in high-performance computing environments, such as queuing systems, distributed file systems, grid computing, and virtual machines in a Linux environment

Net salary is around 2200-2600 euro per month, depending on the experience and including national health insurance. Starting date is around November 2023 – February 2024. Work from remote is also potentially negotiable.

Applications must be sent to biferale@roma2.infn.it and in cc to fabio.bonaccorso@roma2.infn.it writing on the subject: Selection for a data-scientists Smart-TURB project.

ERC Advanced Grant (N. 882340) "Smart-TURB"
(P.I. Prof. Luca Biferale)

Università degli Studi di Roma Tor Vergata
C.F. n. 80213750583 – Partita IVA n. 02133971008 - Via della Ricerca Scientifica, 1 – 00133 ROMA