# JOB OPENINGS

**RUHR-UNIVERSITÄT BOCHUM** 

as of January 22, 2024





## PROFESSORSHIPS

NATURAL SCIENCES

### **Algebraic Geometry**

Faculty of Mathematics

#### Keywords:

Potential fields: Complex Algebraic Geometry, Holomorphic Symplectic Geometry, Calabi-Yau geometry, Kähler Geometry, Arithmetic Geometry, Tropical Geometry, Hodge Theory **Details**:

Junior Professorship W1 w/o Tenure Track | Application Deadline: 31 Jan 2024 | Link to application

## HUMANITIES & SOCIAL SCIENCES

## **Digital Humanities in Religious Studies**

CERES – Center for Religious Studies

#### Keywords:

Procedures and methods of digital information processing for dealing with research questions in the humanities and cultural studies;

#### Details:

Tenure Track Professorsip W1 (Junior/Assistant) | Application Deadline: 31 Jan 2024 | <u>Link to</u> application

## **POSTDOCTORAL/GROUP LEAD POSITIONS**

## ENGINEERING SCIENCES

## Human-Computer Interaction/Computational Social Science

CAIS - Center for Advanced Internet Studies, Chair of Design of Trustworthy Artificial Intelligence

#### Keywords:

RS1 - Trust in AI Through Understanding: Measure and analyze users' understanding of AI systems (User Beliefs, Folk Theories)

RS2 - Trust in AI Through Contro: Controlling the output of ML-based systems

RS3 - Trust in AI Through Co-Creation: Deep involvement of users in the design of AI systems

#### Details:

Up to 5 years, full-time | Application Deadline: 31 Jan 2024 | Link to application

## **Machine Learning Security**

Faculty of Computer Sciences, Chair for Information Security

#### Background:

Doctor in Computer Science or related field.

#### Keywords:

Investigate how to improve the security of machine learning and federated learning algorithms and how to securely use machine learning to secure existing platforms. Background in the areas of IT security and privacy, system security, ML security and security of Federated Learning is a strong plus.

#### Details:

1.5 years, full-time | Application Deadline: 19 February 2024 | Link to application

## Symmetric Cryptography

Faculty of Computer Sciences, ERC Grant "SymTrust"

#### Keywords:

Analysis and the design of symmetric primitives with a focus on security arguments and security proofs.

#### **Details:**

2 years, full-time | Apply by Dec 31, 2024 | Link to application

# NATURAL & LIFE SCIENCES

## **Multiwavelength Astrophysics**

#### Faculty of Physics and Astronomy

#### **Background:**

PhD in Astronomy or Astroparticle Physics, Expertise in MeV - GeV neutrino detection with ice Cherenkov detectors, realtime data analysis systems, analysis software development/maintenance

#### Keywords:

neutrino and gamma-ray data analysis, search for signatures of heavy quark decays in binary neutron star mergers

#### **Details:**

2.5 years, full-time | Apply by 29 Jan 2024 | Link to application

## Molecular characterization of resistance mechanisms

#### Department of Medical Microbiology of the Faculty of Medicine

#### Background:

Degree in natural sciences (biology/bioinformatics) and doctorate. Experience in performing DNA sequencing using Illumina and/or Oxford Nanopore, incl. preparatory techniques and bioinformatic analysis of the sequences obtained (assembly, cgMLST, SNP analyses).

#### Keywords:

biochemical, genetic and molecular characterization of antibiotic resistance mechanisms, especially in the contact area of carbapenem resistance

#### **Details:**

3 years, full-time | Apply by 31 Jan 2024 | Link to application

## **Medical Microbiology**

#### **Faculty of Medicine**

#### Background:

PhD in Biology/Bioinformatics, Experience in performing DNA sequencing using Illumina and/or Oxford Nanopore, including preparatory techniques and bioinformatic analysis of the sequences obtained (assembly, cgMLST, SNP analyses).

#### **Keywords:**

Genome sequencing, Bioinformatic evaluation, Molecular characterization of resistance mechanisms

#### **Details:**

3 years, full-time | Apply by 31 Jan 2024 | Link to application

## New Statistical Methods for Functional Data and Space-time Data

#### Faculty of Mathematics, Chair of Stochastics

#### **Background:**

PhD in statistics or mathematics with very good knowledge in the field of mathematical statistics.

#### **Details:**

2 years, full-time | Apply by 19 February 2024 | Link to application

## **Experimental geophysics**

#### Faculty of Geosciences, Institute of Mineralogy, Geology and Geophysics

#### Background:

PhD in Geosciences, engineering sciences or related subjects

#### Keywords:

Creation of an environment for digital processing of images taken with a borehole elevator, Adaption, evaluation of the data as well as development of optimization proposals

#### **Details:**

2 years, full-time | Apply by 19 February 2024 | Link to application

## Systematics, Evolution and Biodiversity of Plants

Faculty of Biology and Biotechnology, Chair of Molecular Evolution of Plants

#### Background:

Doctorate in botany, plant ecology, evolution and/or systematics of plants

#### Keywords:

Task is the *Habilitation* in the field of systematics, evolution, and biodiversity of plants. Free choice of topic! Implementation and co-organization of exercises on "Morphology and anatomy of plants"

#### **Details:**

4 years, full-time | Apply by 19 February 2024 | Link to application

## Systematics, Evolution and Biodiversity of Plants

# Faculty of Chemistry and Biochemistry, Chair of Inorganic Chemistry II (Organometallic chemistry)

#### Background:

PhD in chemistry with a thematic focus on molecular synthetic chemistry

#### Keywords:

leading role in a project to investigate carbanionic compounds with focus on synthesis and stabilization of low-valent main group compounds and the investigation of their reactivities. Responsible for project management.

#### **Details:**

2 years, full-time | Apply by 5 February 2024 | Link to application

# HUMANITIES & SOCIAL SCIENCES

## Memories of Deindustrialization in Post-industrial Regions in Europe

Institute of Social Movements

#### Background:

PhD from the Humanties or Social Sciences, preferably History. Knowledge of the history and present of post-industrial regions in Europe

#### Keywords:

historical path dependencies of the post-industrial regions in Europe to be examined with regard to how memories of deindustrialization and industrial pasts influence ideas of "good ageing";

#### **Details:**

3 years, full-time | Apply by 5 February 2024 | Link to application

# VARIOUS

## Humboldt Fellowships (through Henriette Herz Scouting Program)

Astronomy, Physical Chemistry, History, Philosophy

#### Keywords:

The Alexander von Humboldt Foundation has selected five outstanding RUB professors as scouts within the prestigious Henriette Herz Scouting Programme . Each of the scouts has the opportunity to recommend three research talents from abroad for a Humboldt Research Fellowship. More infos at <u>www.research-school.rub.de/henriette-herz-scouting</u>

#### **Details:**

up to 2 years, full-time | Apply now | Reach out via e-mail (see end)

## **Permanent Calls**

## IT-Security (several openings)

Cluster of Excellence CASA

#### **Disciplinary Background:**

Computer Science, Cryptography, Electrical Engineering, Mathematics, Psychology

**Details:** 2 years, full-time, Jump-Start-Program | Application accepted all year around | <u>Link to application</u>

## Solvation Science (several openings)

Cluster of Excellence RESOLV

**Disciplinary Background:** Chemistry, Physics, Biochemistry, Chemical, Engineering, and alile **Details:** full-time | Application accepted all year around | <u>Link to application</u>

## Computational/Theoretical Chemistry/Physics (several openings)

Center for Theoretical Chemistry Keywords: molecular dynamics/electronic structure, <u>Link to techniques</u> Details: full-time | Application accepted all year around | <u>Link to application</u>

## IT-Security (several openings)

Cluster of Excellence CASA

#### Disciplinary Background:

Computer Science, Cryptography, Electrical Engineering, Mathematics, Psychology

#### **Details:**

2 years, full-time, Jump-Start-Program | Application accepted all year around | Link to application

### For questions please reach out to research-career@rs.rub.de