



## Call for Applications

### Fellowships in the CAS Research Group “Algebraic Groups, Motives and Applications”

#### Center for Advanced Studies, LMU Munich

The **Center for Advanced Studies at LMU Munich** is a forum for intensive international academic exchange. Its purpose is to promote cooperation with national and international Visiting Fellows who work closely on collaborative projects with LMU professors. In order to intensify cooperation between researchers at LMU Munich and leading experts from other universities, the Center has set up a major program, the **CAS Research Groups**.

The CAS Research Group **“Algebraic Groups, Motives and Applications”** is initiated by Professor Dr. Nikita Geldhauser (Institute for Mathematics, LMU) and will commence its work in October 2025.

The CAS Research Group is based in motivic algebraic geometry. Its goal is to use and further develop modern tools to investigate the structure of algebraic varieties. In particular, the research group will focus around the investigation of algebraic groups, using different oriented cohomology theories.

The work of the CAS research group is divided into three areas: First, to advance the state of the art in motivic homotopy theory. Second, to prove new results on Chow motives of projective varieties related to algebraic groups, and third, to use the tools from algebraic cobordism and algebraic Morava K-theory.

The focus is on applications in the theory of algebraic groups, their motives and cohomological invariants.

The CAS Research Group will bring together internationally renowned researchers who are invited to LMU Munich to contribute to the Group’s research. Applications are interdisciplinary exchange. Both senior and junior (postdoc) researchers are encouraged to apply. The Center for Advanced Studies will provide financial and organizational support for visits of between four weeks and three months during the period between October 2025 and September 2026. Travel and accommodation will be paid for and an expense allowance or other compensation (according to individual agreement) will be provided to cover operating costs or as recompense for any loss of income sustained. Guests will receive a workspace in the Center and will have access to all its facilities. Visiting researchers will find an open and stimulating research environment in an interdisciplinary setting.

**Applications** should consist of a brief outline (1-2 pages) of the expertise, field of exchange and intended contribution to the CAS Research Group. Applications should also contain relevant credentials and a résumé including a list of the most recent publications. We value diversity and hence welcome all applications – regardless of gender, nationality, ethnic and social background, religion/world view, disability or age.

Please submit all the application documents electronically (in one PDF file) by

**31 January 2025** to

Email: [researchgroups@cas.lmu.de](mailto:researchgroups@cas.lmu.de)

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