

## Differential Geometry (University of Vienna, Supervisor: A. Cap)

The successful applicant should work on a thesis project in the area of parabolic geometries and/or BGG sequences of invariant differential operators intrinsic to these structures. I have concrete plans for thesis projects related to Legendrean contact structures and to path geometries, which both have connections to the geometric theory of differential equations. It is also possible to develop a different thesis project jointly with the successful applicant.

Good background on the modern language of differential geometry (in particular, various types of fiber bundles and concepts of connections) is a basic requirement for the position. Prior experience with the study of geometric structures, in particular Cartan geometries or some examples of parabolic geometries, like conformal structures, projective structures, CR structures or others is an advantage but not strictly required. Similarly, background on the theory of Lie groups and Lie algebras, in particular working knowledge of finite dimensional representation theory of semisimple Lie algebras, will be advantageous but not strictly required.

Applications have to be sent via the Job Center of the University of Vienna at the [Reference number 10405](#). The deadline for application is **February 20, 2020**.