

# IC2020\_02\_POSTDOCTORAL FELLOWSHIP IN SINGULARITY THEORY ALGEBRAIC GEOMETRY AND

### Company Description

BCAM is the research center on applied mathematics created with the support of the Basque Government and the University of the Basque Country, which aims to strengthen the Basque science and technology system, by performing interdisciplinary research in the frontiers of mathematics, talented scientists' training and attraction, so the excellence of our results are recognized by the Society.

## Information



# Company





# Main functions, requisites & benefits

#### Main functions

Singularity Theory, Algebraic Geometry and Nearby Topics We look for a new postdoc member for our research group. A general description of our interests can be found in: http://www.bcamath.org/es/research/lines/STAG/general At the moment we are paying special attention to Maximal Cohen Macaulay modules and Matrix Factorizations, Characteristic Classes for singular spaces, Lipschitz Geometry on Singularities and a new connection of Algebraic Geometry and Singularity Theory with Floer Homology Theories (mainly via cohomology of contact loci in arc spaces and jet schemes). For some information about our recent contributions in these topics see: https://arxiv.org/abs/1911.08213 https://arxiv.org/abs/1910.12552 https://arxiv.org/abs/1812.06543

### Requisites

Requirements: Promising research track. Applicants must have their PhD completed before the contract starts. PhD degree in Mathematics or Applied Mathematics. Skills and track-record: Strong background in Algebraic Geometry and/or Singularity Theory and its applications. Ability to effectively communicate and present research ideas. Ability to clearly present and publish research outcomes in spoken (talks) and written (papers) form. Good command of spoken and written English. Good communication skills. Scientific Profile: In order to have an idea of the interests of the mathematician in charge, and the group working in BCAM, please visit the web page <a href="http://www.bcamath.org/en/research/lines/STAG">http://www.bcamath.org/en/research/lines/STAG</a>

