



## **E. Ada Cavalcanti-Adam**

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<https://www.mr.mpg.de/14057512/adacv>

[https://www.pci.uni-heidelberg.de/apc/cavalcanti/staff/cavalcanti\\_cv.html](https://www.pci.uni-heidelberg.de/apc/cavalcanti/staff/cavalcanti_cv.html)

## **Molecular and cellular regulation of integrin- and cadherin-mediated adhesions**

**Tuesday, March 14<sup>th</sup>, 2023  
at 9:00 am**

Seminarraum B1.72

DWI – Leibniz-Institut für Interaktive Materialien

Forckenbeckstraße 50, 52074 Aachen

Host: Laura De Laporte

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**Abstract:** Transmembrane receptors, such as integrins and cadherins, convey chemical and mechanical signals to the intracellular compartment. In the first part of my talk, I will present approaches, based on surface micro- and nanopatterning, to control integrin clustering and the assembly of cell-matrix adhesions during cell migration. A particular focus will be on the regulation of molecular and cellular forces in relation to rigidity sensing of the substrate. In the second part of my talk, I will discuss our recent development on the controlled assembly and mechanics of E-cadherins at cell-cell junctions, and how the crosstalk between cell-matrix and cell-cell adhesion might be coordinated at the nanoscale.