

# Finite Volume approximation of a phase-field cell migration model

Curci Lucas \*  
Aix-Marseille Université, France  
lucas.curci@univ-amu.fr

## Abstract

We propose to measure the impact of the adhesion properties in the two dimensional cell migration using mathematical model based on phase-field methods [Löber et al., 2014]. We present a DDFV approximation of this model which couples a non-local Allen Cahn type equation with advection reaction-diffusion equations

## References

- [Löber et al., 2014] Löber, J., Ziebert, F., and Aranson, I. S. (2014). Modeling crawling cell movement on soft engineered substrates. *Soft Matter*, 10:1365–1373.