

*Singularities in PDE and the calculus of variations*  
Singularités en EDP et dans le calcul des variations  
17–21 *july/juillet*, 2006  
• ATELIER •

## Criticality conditions for the limiting vorticities in the Ginzburg-Landau equations

Sylvia Serfaty  
`serfaty@cims.nyu.edu`  
*Courant Institute of Mathematical Sciences*  
*251 Mercer Street*  
*New York NY 10012*  
*USA*

### **Abstract**

In joint work with *Etienne Sandier*, we investigate the limits of the vortex-density measures for solutions of the Ginzburg-Landau equations. By passing to the limit in the “stress-energy tensor”, we find criticality conditions on the measures and their images under blow-up.