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network information
starting data: 1st january 2007
duration: until the end of multimat project
category: ER
place: barcelona
country: spain

I work on models for the microstructure formation in martensitic transition. The models are based on the inclusion of long range terms in the random field Potts model. A first attempt consisted in the inclusion of nearest neighbor interactions only, in order to identify the relevant hamiltonian terms for the microstructure formation. Now I am working on the inclusion of higher order interaction terms. Our approach is statistical in nature, due to the relevance of the disorder in real systems. In this perspective I am also studying the effect of entropic terms on the microstructure selection at saturation.

The Multimat project has been very useful in my carrier, especially for the opportunity due to the contact with researchers with different scientific backgrounds (like mathematics and engineering).