MATHEMATICAL MODELLING

IN

CONTINUUM MECHANICS.

APPLICATIONS IN MATERIAL SCIENCES.

(25.07.2006 – 30.11.2008)

Director: Prof. Dr. Sanda TIGOIU

The team:

- **Coordinator:** University of Bucharest;

- **Partner 1:**   Institute of Mathematics "Simion Stoilow" of the
   Romanian Academy (**Responsible:** CSI Lori BADEA);

- **Partner 2:**   University "Al. I. Cuza", Iasi (**Responsible:**
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- **Partner 3 :** Institute of Mathematical Statistics and Applied Mathematics
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Phases:

- **Phase I:** Results with applications in Continuum Mechanics. Elasto-plastic models with structural inhomogeneities and functionally graded models. **(30.11.2006)**;

- **Phase II:** Results on the behavior of non-newtonian and micropolar fluids. **(31.07.2007);**

- **Phase III:** Elasto-visco-plastic models analysis. Numerical methods for evolution operators. **(30.11.2007);**

- **Phase IV:** Microstretch models in micropolar mixtures. Methods and results in numerical approximation. **(31.07.2008);**

- **Phase V :** Mathematical and numerical models in Continuum Mechanics. Final results. **(30.11.2008).**