

**Yan Grasselli**



**Contact**

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**Position**

Professor of Physics and Computer Science  
Head of the Mathematics & Computer Science Department

**Nationality**

French

**Educational background**

1993	Phd in soft condensed matter on the : « Microstructural study of electro and magnetorheological suspensions » - University of Nice (Highest honours with congratulations of jury)
1990	D.E.A. (post graduate degree) in Materials Science

**Academic appointments**

2006- : Head of the Mathematics & Computer Science department  
2000- : Professor of Physics and Computer Science  
1990-1993 : Moniteur (reader) University of Nice Sophia Antipolis

**Courses taught**

Software development with C++, VB and Java  
Engineering and Science of materials  
Applied Mechanics : Dynamics  
General Physics (1 & 2)

## Professional experience

1999-2000 Engineer in Computer Science : IBM La Gaude (F)  
1995-1996 Teaching Assistant University of Nice (F)  
1994-1995 Post Doc : LPMMH UMR 7636 – ESPCI Paris (F)

## Experience abroad

1996-1999 Post Doc : ICA1 University of Stuttgart (D) – TMR support

## Research interests

Granular Media  
Adaptative Fluids  
Nano-Rheology

## Intellectual contribution / Referred Articles

- Experimental investigation of granular cooling down in microgravity  
Y. Grasselli, G. Bossis, submitted J. Gran. Matt.
- Sheared and vibrated granular gas in microgravity  
Y. Grasselli, G. Bossis, A. Audoly, Proc. Int. Conf. TGF 05 – Berlin (10/05).  
Traffic and Granular Flow'05, Schadschneider et al. Ed. Springer, p. 157
- Granular rheology in zero-gravity  
G. Bossis, Y. Grasselli, O. Volkova, *J. Phys. Cond. Mat.*, **16**, p.3279, (2004).
- Crater formation on a three dimensional granular heap  
Y. Grasselli, H. Herrmann, *J. Granular Matter*, **3**, 4, p. 201 (2001)
- On the shape of a granular heap  
Y. Grasselli, H. Herrmann, G. Oron, S. Zapperi, *J. Granular Matter*, **2**, 2, p.97 (2000)
- Shapes of heaps and in silos  
Y. Grasselli, H. Herrmann, *Eur. J. Phys. B*, **10**, p. 673 (1999)
- Experimental study of granular stratification  
Y. Grasselli, H. Herrmann, *J. Granular Matter*, **1**, 1, p. 43 (1998).
- Etude expérimentale sur la forme d'un tas de billes dans un silo bidimensionnel  
Y. Grasselli, H. Herrmann, *C.R. Acad. Sci. Paris*, t. 326, Série .Iib p. 61 (1998)
- On the angles of dry granular heaps  
Y. Grasselli, H. Herrmann, *Physica A*, 246, p.301 (1997)
- Hydrodynamic interactions between a particle and two rigid walls : effects of surface roughness and many body hydrodynamic interactions  
Y. Grasselli, L. Lobry, *Phys. Fluids*, 9, 12, p. 3929 (1997)
- Three dimensional particle tracking for the characterization of micronic colloidal particles  
Y. Grasselli, G. Bossis, *J. Coll. Int. Sci.*, 170, p. 269 (1995)
- Structure induced in suspensions by a magnetic field  
Y. Grasselli, G. Bossis, E. Lemaire, *J. Phys. II*, p. 253 (1994)
- Theoretical analysis of field induced structure in E.R. and M.R. fluids  
G. Bossis, H. Clercx, Y. Grasselli, E. Lemaire, *Int. J. Mod. Phys. B*, 8, N8 20&21 (1994)
- Phase separation and flow induced anisotropy in electrorheological fluids  
G. Bossis, Y. Grasselli, E. Lemaire, J. Persello, L. Petit  
*Europhys. Lett.*, 25 (5), p. 335 (1994)
- Rheology and microstructure in colloidal suspensions

*G. Bossis, Y. Grasselli, E. Lemaire, A. Meunier, J.F. Brady, T. Phung*  
Physica Scripta, V. T49, p.89 (1993)

- Field induced structure in magnetorheological suspensions  
*Y. Grasselli, G. Bossis, E. Lemaire*, Prog. Coll. Polym. Sci., 93, p. 175 (1993)
- Yield stress and structuration of magnetorheological suspensions  
*E. Lemaire, G. Bossis, Y. Grasselli*, J. Magnetism and Magnetic Materials, 122, p. 51 (1993)
- Field induced structure in magneto and electro rheological fluids  
*E. Lemaire, Y. Grasselli, G. Bossis*, J. Phys. II, 2, p. 359 (1992)
- Rheological behavior of electro rheological fluids  
*E. Lemaire, G. Bossis, Y. Grasselli*, Langmuir, 8, p. 2957 (1992)
- Yield stress and field induced structure in electro and magnetorheological suspensions  
*G. Bossis, Y. Grasselli, E. Lemaire, L. Petit, J. Persello*  
Ed. R. Tao, « Electrorheological fluids », World Scientific, (1992)

### **Intellectual contributions / Academic Articles**

- Three dimensional optical particle tracking in colloidal suspensions  
*Y. Grasselli, G. Bossis*, Surface Characterization methods : Principles, Techniques and Applications, Marcel Dekker ed., A.Milling, (1998).

### **Selected oral communications**

- Y. Grasselli, G. Bossis  
« *Cisaillement et écoulement d'un gaz granulaire en microgravité* », GDR MFA, Fréjus, 12/06
- Y. Grasselli, G. Bossis  
« *Sheared and vibrated granular gas* », Int. Conf. Traffic and Granular Flows, Berlin, Oct 2005
- Y. Grasselli, H. Herrmann  
« *Shape of a granular heap in a two dimensional silo* » GDR Dry granular materials, Paris Novembre 97
- L. Petit, Y. Grasselli, P. Gondret, C. Olivier, G. Bossis  
« *Mesures de coefficient de diffusion de particules colloïdales par suivi optique dynamique* »  
Visualisation et traitement d'images en mécanique des fluides. St Etienne, Mai 95
- Y. Grasselli, M. Fermigier  
« *Fluctuations thermiques de chaînes de particules polarisées* » Journées Physique Statistique. Paris Janvier 95
- E. Lemaire, G. Bossis, Y. Grasselli, A. Meunier  
« *Dynamics of structure deformation and the rheology of electrorheological fluids* » 65th Meeting of the Soc. of Rheology. Boston (USA) Octobre 93
- G. Bossis, H. Clercx, Y. Grasselli, E. Lemaire  
« *Analysis of field induced structures in electro and magnetorheological fluids* » IVe Int. Conf. on E.R. Fluids. Bregenz (D) Juillet 93
- Y. Grasselli, G. Bossis, E. Lemaire  
« *Field induced structure in colloidal suspensions* » VIe E.C.I.S. Conf. - Graz (A) Septembre 92
- G. Bossis, Y. Grasselli, E. Lemaire, C. Paparoditis

« *Yield stress and structuration of magnetorheological suspensions* »

VIe Int. Conf. on Magnetism Fluids. Paris Juillet 92

- E. Lemaire, Y. Grasselli, G. Bossis

« *Induced structure in colloidal suspensions submitted to an electric or a magnetic field* »

5th European Colloid and interface conference. Mainz (D) Septembre 91

### **Editorial activities**

Referee Journal of Granular Matter

Referee European Journal of Physics E : Condensed Matter

### **Membership of academic associations/networks**

Laboratoire de physique de la Matière Condensée –UMR 6622– University of Nice (F)

Institute for Computer Applications 1 – ICA1 – University of Stuttgart (D)

Ecole Polytechnique de Zurich (CH)

### **Languages**

French, English, Italian