

## CECAM Discussion-Meeting

*“Modelling bio-molecular interactions: A multi-scale approach joining theory and experiment”*

Université Paris-Est Marne-La-Vallée  
Laboratoire de Modélisation et Simulation Multi Echelle  
Equipe de Chimie Théorique

### Thursday, 18.05.2017

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|------------------------|--|
| <b>09:00h</b>          | <b>Welcome &amp; Coffee</b>  |
| <b>09:30h - 10:05h</b> | <b>Ulli Englert</b><br>Bio-molecular interactions: Experimental input from chemical crystallography                  |
| <b>10:05h - 10:40h</b> | <b>Antonia Mey</b><br>Predicting Ligand Protein Interactions with Alchemical Free Energy Methods on Blinded Datasets |
|                        | <i>Discussion and coffee break</i>   |
| <b>11:20h - 11:55h</b> | <b>Paolo Carloni</b><br>Multiscale simulations in molecular medicine: recent advances from Jülich                    |
| <b>11:55h - 14:00h</b> | <b>LUNCH</b>   |
| <b>14:00h - 14:35h</b> | <b>Domenica Dibenedetto</b><br>Learn about learning, from a computational neuroscientific perspective                |
| <b>14:35h - 15:10h</b> | <b>Dulce Papy-Garcia</b><br>Tau protein and heparan sulfates interaction in Alzheimer's disease                      |
|                        | <i>Discussion and coffee break</i>   |
| <b>15:50h - 16:25h</b> | <b>Eric Ruelland</b><br>Biomolecular interactions in situation: The example of phytohormones                         |
| <b>16:25h - 17:00h</b> | <b>Xiaoqing Cong</b><br>Molecular dynamics simulations of GPCR-ligand interactions and GPCR activation               |
| <b>17:00h - 17:30h</b> | <b>Discussion</b>  |

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### Friday, 19.05.2017

- 09:30h - 10:05h**      **Majdi Hochlaf**  
On the role of small S-nitrosothiols (RSNOs) as light-sensitive NO-donors for delivery in biological media
- 10:05h – 10:40h**      **Gwenaëlle André-Leroux**  
OH1 from Orf virus: a new tyrosine phosphatase that displays distinct structural features and triple substrate specificity  
*Discussion and coffee break*
- 11:20h - 11:55h**      **Isabelle Demachy**  
Photoswitching mechanism of the Fluorescent protein Padron
- 11:55h - 14:00h**      **LUNCH**
- 14:00h - 14:35h**      **Maximilien Levesque**  
Free energy of solvation of molecules of any size in few minutes by molecular density functional theory
- 14:35h – 15:10h**      **Lucie Delemotte**  
A multiscale computational approach to explore the complex dynamics of an ion channel voltage sensor domain
- 15:10h – 15:55h**      **Discussion**
- ~ 16:00h              *Closing remarks*