

## November 3 | Monday

### Density Functional Theory for Materials Modeling

**09:00-10:40**

Introduction to Density Functional Theory

**Coffee Break**

**11:00-12:30**

Introduction to Density Functional Theory + Linear Algebra Use in DFT Codes

**Lunch Break**

**14:00-15:30**

Practical Sessions with Siesta

**Coffee Break**

**16:00-17:40**

Practical Sessions with Siesta

**Poster Session**

## November 4, Tuesday

### Quantum Monte Carlo Methods for Accurate Materials Simulations

**09:00-10:40**

Introduction to Quantum Monte Carlo

**Coffee Break**

**11:00-12:30**

Introduction to Quantum Monte Carlo + Linear Algebra use in QMC Codes

**Lunch Break**

**14:00-15:30**

Practical Sessions with TurboRVB

**Coffee Break**

**16:00-17:40**

Practical Sessions with TurboRVB

## November 5, Wednesday

**Many-Body Perturbation Theory and the GW Approximation**

**09:00-10:40**

Introduction To Many-Body Perturbation Theory

**Coffee Break**

**11:00-12:30**

Introduction To Many-Body Perturbation Theory + Linear Algebra Use in GW Codes

**Lunch Break**

**14:00-15:30**

Practical Sessions with Yambo

**Coffee Break**

**16:00-17:40**

Practical Sessions with Yambo

**Venue Buffet**

## November 6, Thursday

**Pushing the Boundaries of Large-Scale Simulations**

**Chair: TBA**

**09:00-09:45**

Ayako Nakata (NIMS, Tsukuba)



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EuroHPC  
Joint Undertaking

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**09:45-10:10**

Laura Ratcliff (School of Chemistry, University of Bristol) TBC

**10:15-10:40**

Miguel Pruneda (CINN-CSIC, Oviedo)

**Coffee Break**

**Recent Advances in Linear Algebra Libraries for Materials Science**

**Chair: Luigi Genovese**

**11:00-11:45**

Toshiyuki Imamura (Riken-CCS, Kobe)

**11:45-12:10**

Clément Richerfort (Jülich Supercomputing Centre)

**12:10-12:35**

Laura Grigori (EPFL, Lausanne)

**Wrap up (5 minutes)**

**Lunch Break**

**Greens Function Methods for Spectroscopy**

**Chair: Alessandro Pecchia**

**14:00-14:45**

Takao Kotani (Tottori University)

**14:45-15:10**

Maria Hellgren (IMPMC, Sorbonne Université, Paris)

**15:10-15:35**

Fabien Bruneval (CEA Saclay)

**Coffee Break**

**16:00-16:45**

Lucia Reining (LSI, Ecole Polytechnique, Palaiseau)

**16:45-17:10**

Andrea Ferretti (CRN Nano, Modena)

**17:10-17:35**

Valerio Olevano (Institut Néel, Grenoble)

**Wrap up (5 minutes)**

**Conference Dinner**

## November 7, Friday

**Modelling and Simulation of Energy Materials**

**Chair: TBA**

**09:00-09:45**

Azusa Muraoka (Japan Women's University)

**09:45-10:10**

Vitaly Gorelov (LSI, Ecole Polytechnique, Palaiseau)

**10:15-10:40**

Aran Garcia Lekue (DIPC, San Sebastian) TBC

**Coffee Break**

**Machine Learning for Materials Research**

**Chair: Pablo Ordejón**

**11:00-11:45**

Terumasa Tadano (NIMS, Tsukuba)

**11:45-12:10**

Makus Holzmann (LPMMC, Université Grenoble-Alpes)

**12:10-12:35**

Alessandra Serva (PHENIX, Sorbonne Université)

**Wrap up (5 minutes)**



## Electronic and Optical Properties of Innovative Materials

Chair: Giacomo Giorgi

**14:00-14:45**

Sergei Manzhos (Tokyo Institute of Technology)

**14:45-15:10**

George Volonakis (Université de Rennes)

**15:10-15:35**

TBA

**16:00-16:45**

Maurizia Palummo (University of Rome Tor Vergata)

**16:45-17:10**

Claudio Quarti (University of Mons)

**17:10-17:35**

Michele Amato (LPS, Université Paris-Saclay)

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