

## MC 31 Moiré, super-moiré and quasiperiodic quantum matter in twisted van der Waals heterostructures I

Wednesday, 4 September, afternoon

**Chairman:** 

Room:

| Hours | ID    | Name                 | Туре        | Title  |
|-------|-------|----------------------|-------------|--|
| 16h00 | 12700 | Dante Kennes         | invited     | Moiré heterostructures as a condensed-matter quantum simulator   |
| 16h30 | 13909 | Roshan Krishna Kumar | invited     | Twisted Quantum Photovoltaics  |
| 17h00 | 13817 | Rajdeep Sensarma     |             | Electronic correlations and non-Fermi liquid behaviour in twisted double bilayer Graphene                      |
| 17h15 | 13530 | Miguel S Sánchez     | Dral Contri | Correlated phases and topological phase transition in twisted bilayer graphene at one quantum of magnetic flux |
| 17h30 | 12932 | Tiago Antão          | Dral Contri | Designing frustrated moiré order with twisted van der Waals multiferroics                                      |
| 17h45 | 12750 | Ajay Singh           | Dral Contri | Evolution of flat band Segments and Van-Hove Singularities in Twisted bi-layer Graphene                        |
| 18h00 | 12545 | Johannes Lischner    | invited     | Electrons, excitons and phonons in moiré materials from atomistic simulations                                  |

## MC 31 Moiré, super-moiré and quasiperiodic quantum matter in twisted van der Waals heterostructures II

Thursday, 5 September, morning

Chair: Room:

| Hours | ID    | Name             | Туре         | Title   |
|-------|-------|------------------|--------------|---|
| 10h30 | 13017 | Ulrich Schneider | invited      | Ultracold atoms in an optical quasicrystal  |
| 11h00 | 13865 | Bruno Amorim     | invited      | The role of quasiperiodicity in one- and two-dimensional moiré materials                    |
| 11h30 | 13922 | Nicolau Sobrosa  | Dral Contri  | Correlated phases and collective modes of 1D moiré materials                                |
| 11h45 | 13819 | Raul Liquito     | Dral Contri  | Transport properties of 1D AA-like systems  |
| 12h00 | 13542 | Balázs Hetényi   | Dral Contril | Extending the modern theory of polarization to handle the metallic side: Application to the |
|       |       |                  |              | localization transition of quasi-periodic models  |
| 12h15 | 13025 | Veniero Lenzi    | Dral Contri  | Understanding twisted COF monolayers on graphene  |
| 12h30 | 12630 | Yonglong Xie     | invited      | Strong interactions and isospin symmetry breaking in a supermoiré lattice                   |



## MC 31 Moiré, super-moiré and quasiperiodic quantum matter in twisted van der Waals heterostructures III

Thursday, 5 September, afternoon

Chair: Room:

| Hours | ID    | Name             | Туре    | Title   |
|-------|-------|------------------|---------|---|
| 16h00 | 13268 | Tobias Stauber   | invited | Nematic versus triplet superconductivity and chirality in twisted bilayer graphene                    |
| 16h30 | 13526 | Chithra H Sharma | invited | Moiré mini-bands and spin-valley flavors in twisted TMDCs   |
| 17h00 | 13740 | Ricardo Oliveira | Oral    | Mean-field theory of superconductivity in two-dimensional Aubry-André models                          |
| 17h15 | 13465 | Chao Chen Ye     | Oral    | First-principles studies of bilayer CrI3 under interlayer sliding                                     |
| 17h30 | 13075 | Bert Jorissen    | Oral    | Tight-Binding investigation of Proximity-Induced Spin-Orbit Coupling in Graphene-TMD Heterostructures |
| 17h45 | 12664 | Pierre P Peralta | invited | Designing Moire Patterns by Strain  |

## Poster Session Thursday, 5 September

| ID    | Name             | Title                                      |
|-------|------------------|--|
| 13653 | Igor Vasilevskiy | Phase diagram of twisted trilayer graphene |