COST Action CA20116



International Hybrid Training School Characterization Techniques for Epitaxial Materials University of Aveiro, Portugal - 13<sup>th</sup> to 17<sup>th</sup> June 2023

European Network for Innovative and Advanced Epitaxy

|                       | 13 <sup>th</sup> June                    | 14 <sup>th</sup> June                                    | 15 <sup>th</sup> June                                | 16 <sup>th</sup> June  | 17 <sup>th</sup> June  |
|-----------------------|--|--|--|--|--|
| 9h00<br>9h30<br>10h00 |  | Diffraction techniques<br>José António Paixão            | Optical characterization<br>Charles Cornet           | Assessing nanoscale<br>(opto)electronic<br>properties through<br>advanced SPM<br>Sascha Sadewasser | Piezoresponse force<br>microscopy in epitaxial<br>materials<br>Vladimir Shvartsman |
| 10h30                 |  | refreshement & poster<br>session                         | refreshement & poster<br>session                     | refreshement & poster<br>session   | refreshement   |
| 11h00                 |  | X-ray Metrology of<br>Epitaxial Group-III-               | Characterization of<br>functional oxides thin        | Scanning tunneling microscopy and related  | Pratical analysis of<br>combined AFM and   |
| 11h30                 |  | Nitrides for Device<br>Fabrication                       | films & heterostructures<br>using Raman              | spectroscopies in epitaxy materials  | microRaman<br>Maxim Ivanov &   |
| 12h00                 |  | Lutz Kirste  | Joaquim Agostinho                                    | Lucia Vitali   | Timur Nikitin  |
| 12h30                 |  |  |  |  |  |
| 13h00                 |  | Lunch  | Lunch  | Lunch  | Lunch  |
| 13h30                 |  |  |  |  |  |
| 14h00                 |  | Hands on case studies                                    | Characterization tools                               | Scanning probe   |  |
| 14h30                 | Welcome                                  | using diffraction<br>techniques<br>José António Paixão & | on epitaxial growth<br>control<br>Armando Lourenço & | microscopy of epitaxy of<br>metal complex oxides   | Advanced SPM<br>Technical session II   |
| 15h00                 | TEM for thin films and                   | Lutz Kirste  | Ricardo Silva  | Alexander Tselev   |  |
| 15h30                 | 2D Materials<br>Paulo J Ferreira         | refreshement & poster<br>session                         | refreshement & poster<br>session                     | refreshement & poster<br>session   |  |
| 16h00                 |  |  |  |  | refreshement   |
| 16h30                 | refreshement & poster<br>session         |  |  | Visit to the laboratories  |  |
| 17h00                 | The impact of materials growth in device | Visit to the laboratories                                | Visit to the laboratories                            | + Advanced SPM<br>Technical session I  | Advanced SPM<br>Technical session II   |
| 17h30                 | performance and<br>scalability           |  |  |  |  |
| 18h00                 | Susana Cardoso de                        |  |  |  |  |
| 18h30                 | 2 minutes PITCH                          | 2 minutes PITCH  |  |  |  |