

# FITNESS

FOR ACTIVE  
DISTRIBUTION  
NETWORKS  
IN SMART GRIDS

## I Spring School

## New market models in distribution networks



Funded by  
the European Union



Escuela Técnica Superior  
Ingeniería Industrial  
Ciudad Real

| 21st April |                                                                                                                                                   | 22nd April |                                                                                        | 23rd April |                                                                           | 24th April |                                                                     |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------|------------|---------------------------------------------------------------------|
| 9:30       | Welcome                                                                                                                                           |            |                                                                                        |            |                                                                           |            |                                                                     |
| 10:00      | Session 1                                                                                                                                         | 10:00      | Session 2                                                                              | 9:00       | WP5: Market models and flexibility quantification in distribution systems | 9:30       | Industrial sessions by R2M, Minsait, Siemens-Energy, Phase to Phase |
|            | Overview of European TSO-DSO Coordination Platforms and Distribution Locational Marginal Pricing under Generation and Network Scarcity Conditions |            | Distributed electricity markets for distributed resources in active distribution grids |            |                                                                           |            |                                                                     |
|            | A. Papavasiliou                                                                                                                                   |            | Ettore F. Bompard                                                                      | 10:15      | WP6: TSO-DSO interaction                                                  | 11:15      | Closing                                                             |
| 11:45      | Coffee break                                                                                                                                      | 11:45      | Coffee break                                                                           | 11:30      | Coffee break                                                              | 11:30      | Coffee break                                                        |
| 12:15      | Workshop 1                                                                                                                                        | 12:15      | Workshop 3                                                                             | 12:00      | WP7: Advanced distribution management systems                             | 12:00      | Progress Report meeting                                             |
|            | Introduction to stochastic programming                                                                                                            |            | Introduction to risk management                                                        |            |                                                                           |            |                                                                     |
|            | Luis Baringo                                                                                                                                      |            | Javier Contreras                                                                       |            |                                                                           |            |                                                                     |
| 14:00      | Lunch                                                                                                                                             | 14:00      | Lunch                                                                                  | 13:30      | Lunch                                                                     | 13:30      | Lunch                                                               |
| 15:30      | Workshop 2                                                                                                                                        | 15:30      | Session 3                                                                              | 15:30      | WP8: Communication and control in distribution networks                   |            |                                                                     |
|            | Introduction to hierarchical optimization                                                                                                         |            | Sources of revenue for energy storage in Distribution Networks                         |            |                                                                           |            |                                                                     |
|            | José Manuel Arroyo                                                                                                                                |            | Hrvoje Pandzic                                                                         |            |                                                                           |            |                                                                     |
| 17:30      | Cultural visit to Ciudad Real                                                                                                                     |            |                                                                                        | 17:00      | WP9: Edge computing in distribution systems                               |            |                                                                     |