

# International School of Nanophotonics and Photovoltaics 2009

September 17-24, 2009 - Maratea (PZ), Italy

## School Program

| <b>17 – 09 - 09</b>   |       | <b>Speakers</b>     | <b>Title of lecture</b>   |
|---|-------|---------------------|---|
| <b>Arrival and registration of the participants at the Hotel Villa del Mare</b> |       |                     |   |
| 13.00   | 14.30 | <b>Lunch</b>        |   |
| 15.00   | 15.45 |                     |   |
| 16.00   | 16.45 | E. Ivchenko         | <i>Photogalvanic Effects in Noncentrosymmetric Nanostructures</i> |
| 16.45   | 17.00 | <b>Coffee Break</b> |   |
| 17.00   | 17.45 | E. Ivchenko         | <i>Photogalvanic Effects in Noncentrosymmetric Nanostructures</i> |
| 18.00   | 18.45 | M. Vladimirova      | <i>Collective spin excitations in doped CdMnTe quantum wells</i>  |

| <b>18 – 09 - 09</b> |       | <b>Speakers</b>     | <b>Title of lecture</b>  |
|---------------------|-------|---------------------|--|
| 9.00                | 9.45  | L. Vina             | <i>Superfluidity of polaritons in semiconductor microcavities</i>  |
| 10.00               | 10.45 | L. Vina             | <i>Superfluidity of polaritons in semiconductor microcavities</i>  |
| 11.00               | 11.45 | A. Bramati          | <i>Superfluidity of exciton-polaritons</i>                         |
| 12.00               | 12.45 | J. Tignon           | <i>Parametric scattering in microcavities</i>                      |
| 13.00               | 14.30 | <b>Lunch</b>        |  |
| 15.00               | 15.45 |                     |  |
| 16.00               | 16.45 | J. Keeling          | <i>Comparing non-equilibrium polariton condensation and lasing</i> |
| 16.45               | 17.00 | <b>Coffee Break</b> |  |
| 17.00               | 17.45 | A. Bramati          | <i>Optical spin control in semiconductor microcavities</i>         |

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| <b>19 – 09 – 09</b> |       | <b>Speakers</b>     | <b>Title of lecture</b>   |
|---------------------|-------|---------------------|---|
| 9.00                | 9.45  | A. Reale            | <i>Organic Photovoltaics</i>  |
| 10.00               | 10.45 | A. Reale            | <i>Organic Photovoltaics</i>  |
| 11.00               | 11.45 | G. Gigli            | <i>Molecular/hybrid Micro-Nanotechnologies for Photonic Application</i> |
| 12.00               | 12.45 | G. Gigli            | <i>Molecular/hybrid Micro-Nanotechnologies for Photonic Application</i> |
| 13.00               | 14.30 | <b>Lunch</b>        |   |
| 15.00               | 15.45 |                     |   |
| 16.00               | 16.45 | C. Bignozzi         | <i>The chemistry of Dye sensitized Solar Cells</i>                      |
| 16.45               | 17.00 | <b>Coffee Break</b> |   |
| 17.00               | 17.45 | S. M. Goodnick      | <i>Nanostructured &amp; High Efficiency Photovoltaics</i>               |
| 18.00               | 18.45 | S. M. Goodnick      | <i>Nanostructured &amp; High Efficiency Photovoltaics</i>               |

| <b>20 – 09 – 09</b> |       | <b>Speakers</b>      | <b>Title of lecture</b>                                      |
|---------------------|-------|----------------------|--|
| 9.00                | 9.45  | P. Kailuweit         | <i>III/V Photovoltaics – Technology and Applications</i>     |
| 10.00               | 10.45 | P. Kailuweit         | <i>III/V Photovoltaics – Technology and Applications</i>     |
| 11.00               | 11.45 | P. Lugli             | <i>Organic Photovoltaics and Photodetectors</i>              |
| 12.00               | 12.45 | P. Lugli             | <i>Organic Photovoltaics and Photodetectors</i>              |
| 13.00               | 14.30 | <b>Lunch</b>         |  |
| 15.00               | 15.45 |                      |  |
| 16.00               | 16.45 | C. Bignozzi          | <i>Electrochemistry of DSC</i>                               |
| 16.45               | 17.00 | <b>Coffee Break</b>  |  |
| 17.00               | 17.45 | G. Tulloch           | <i>The road to industrialisation for advanced technology</i> |
| 18.00               | 18.45 | C. Bettiol           | <i>The relation between energy and human being</i>           |
| 20.00               |       | <b>Social Dinner</b> |  |

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| <b>21 – 09 – 09</b> |       | <b>Speakers</b> | <b>Title of lecture</b> |
|---------------------|-------|-----------------|-------------------------|
| 9.00                | 9.45  |                 | <b>Visit to Pompei</b>  |
| 10.00               | 10.45 |                 |                         |
| 11.00               | 11.45 |                 |                         |
| 12.00               | 12.45 |                 |                         |
| 13.00               | 14.30 |                 |                         |
| 15.00               | 15.45 |                 |                         |
| 16.00               | 16.45 |                 |                         |
| 17.00               | 17.45 |                 |                         |

| <b>22 – 09 - 09</b> |       | <b>Speakers</b>     | <b>Title of lecture</b>   |
|---------------------|-------|---------------------|---|
| 9.00                | 9.45  | F. P Laussy         | <i>Strong coupling of light and matter</i>                                      |
| 10.00               | 10.45 | F. P Laussy         | <i>Strong coupling of light and matter</i>                                      |
| 11.00               | 11.45 | J. Bloch            | <i>GaAs microactivities: a model system for polariton non-linear optics</i>     |
| 12.00               | 12.45 | A. Kavokin          | <i>Exciton-mediated superconductivity</i>                                       |
| 13.00               | 14.30 | <b>Lunch</b>        |   |
| 15.00               | 15.45 |                     |   |
| 16.00               | 16.45 | D. Solnyshkov       | <i>Polariton lasers</i>   |
| 16.45               | 17.00 | <b>Coffee Break</b> |   |
| 17.00               | 17.45 | D. Solnyshkov       | <i>Polariton lasers</i>   |
| 18.00               | 18.45 | M. Portnoi          | <i>Optical properties and THz applications of carbon nanotubes and graphene</i> |

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| <b>23 – 09 – 09</b> |       | <b>Speakers</b>     | <b>Title of lecture</b>                                   |
|---------------------|-------|---------------------|---|
| 9.00                | 9.45  | M. De Vittorio      | <i>Quantum Dots: Technology, Devices and Applications</i> |
| 10.00               | 10.45 | M. De Vittorio      | <i>Quantum Dots: Technology, Devices and Applications</i> |
| 11.00               | 11.45 | K. Kavokin          | <i>Optical orientation</i>                                |
| 12.00               | 12.45 | K. Kavokin          | <i>Optical orientation</i>                                |
| 13.00               | 14.30 | <b>Lunch</b>        |   |
| 15.00               | 15.45 |                     |   |
| 16.00               | 16.45 | I. Shelykh          | <i>Spinoptronics</i>                                      |
| 16.45               | 17.00 | <b>Coffee Break</b> |   |
| 17.00               | 17.45 | I. Shelykh          | <i>Spinoptronics</i>                                      |
| 18.00               | 18.45 | M. Kaliteevskii     | <i>Disorder in photonic crystals</i>                      |

| <b>24 – 09 – 09</b>  | <b>Speakers</b> | <b>Title of lecture</b> |
|----------------------|-----------------|-------------------------|
| <b>Departure day</b> |                 |                         |