

**IPM school and conference on Particle Physics (IPP15): Neutrino physics, dark matter and B-physics**

School of physics, IPM, Tehran, Iran

22-27 September 2015 (31st Shahrivar-5th Mehr 1394)

**Program**

| School                                       |              |             |             |             |             |             |             |                |                           |
|--|--------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|---------------------------|
|  | 09:00-09:45  | 09:45-10:00 | 10:00-12:00 | 12:00-14:00 | 14:00-16:00 | 16:00-16:30 | 16:30-18:30 | 18:30-19:30    | 19:30-20:30               |
| Tuesday<br>22 Sept. 2015 (31 Shahrivar 1394) | Registration | Openning    | M. Tytgat   | Lunch       | E. Akhmedov | Break       | A. Romanino | Poster Session | Reception                 |
|  | 08:45-09:45  | 09:45-10:00 | 10:00-12:00 | 12:00-14:00 | 14:00-16:00 | 16:00-16:30 | 16:30-18:30 | 18:30-19:00    | 19:00-20:00               |
| Wednesday<br>23 Sept. 2015 (1 Mehr 1394)     | D. Meloni    | Break       | M. Tytgat   | Lunch       | E. Akhmedov | Break       | A. Romanino | Break          | A. Ereditato / Discussion |
| Thursday<br>24 Sept. 2015 (2 Mehr 1394)      | D. Meloni    | Break       | M. Tytgat   | Lunch       | E. Akhmedov | Break       | A. Romanino | Break          | Discussion                |
| <b>Friday- Excursion</b>                     |              |             |             |             |             |             |             |                |                           |

| Workshop                 |                         |                         |             |             |             |               |              |               |             |             |             |              |             |
|--------------------------|-------------------------|-------------------------|-------------|-------------|-------------|---------------|--------------|---------------|-------------|-------------|-------------|--------------|-------------|
|                          | 10:00-10:30             | 10:30-11:00             | 11:00-11:30 | 11:30-12:00 | 12:00-14:00 | 14:00-14:30   | 14:30-15:00  | 15:00-15:30   | 15:30-16:00 | 16:00-16:30 | 16:30-17:00 | 17:00-17:30  | 17:30-18:00 |
| Saturday (26 Sept. 2015) | E. Akhmedov             | D. Meloni               | A. Romanino | C. Hagedorn | Lunch       | G. Zaharijas  | N. Bozorgnia | M. Tytgat     | J. Heck     | Break       | A. Ahriche  | A. Khan      | I. Turan    |
| Sunday (27 Sept. 2015)   | B. Choudhary<br>(Skype) | S. Agarwalla<br>(Skype) | P. Mehta    | P. Bakhti   | Lunch       | A. Ioannisyan | A.M. Guler   | Y. Pezeshkian | B. Dev      | Break       | A. Rezaei   | Q. Exirifard | Discussion  |

| Title of Talks       |  |
|----------------------|--|
| School               |  |
| <b>E. Akhmedov</b>   | Neutrino physics -- present status and theoretical issues.                       |
| <b>A. Romanino</b>   | Beyond the Standard Model.   |
| <b>D. Meloni</b>     | Grand unification.   |
| <b>M. Tytgat</b>     | Lectures on dark matter.   |
| <b>A. Ereditato</b>  | Special talk (30'+15')-The international neutrino program at Fermilab.           |
| Workshop             |  |
| <b>E. Akhmedov</b>   | Another look at collective neutrino oscillations.                                |
| <b>D. Meloni</b>     | Bimaximal neutrino mixing and GUT's.   |
| <b>A. Romanino</b>   | General considerations on lepton mixing.   |
| <b>C. Hagedorn</b>   | Predicting low and high energy phases in the lepton sector.                      |
| <b>G. Zaharijas</b>  | Indirect searches for dark matter.   |
| <b>N. Bozorgnia</b>  | The dark matter distribution as predicted by cosmological simulations.           |
| <b>M. Tytgat</b>     | Gamma rays from heavy minimal dark matter.                                       |
| <b>J. Heck</b>       | B-physics and other anomalies as hints for new physics.                          |
| <b>S. Nasri</b>      | Neutrino Masses, Dark Matter and Electroweak Phase Transition.                   |
| <b>A. Ahriche</b>    | Generating neutrino mass and electroweak symmetry breaking radiatively.          |
| <b>A. Khan</b>       | Non-standard neutrino interactions and the reactor neutrino experiments.         |
| <b>I. Turan</b>      | Constraining Dark Photon via Neutrino-Electron Scattering Experiments.           |
| <b>B. Choudhary</b>  | Results from Long-Baseline Experiments.  |
| <b>S. Agarwalla</b>  | Can Daya Bay Probe Non-Standard Neutrino Interactions?                           |
| <b>P. Mehta</b>      | Non-standard neutrino oscillations.  |
| <b>P. Bakhti</b>     | A terrestrial test for exotic solution of solar neutrino anomaly.                |
| <b>A. Ioannisyan</b> | Scanning the Earth with solar neutrinos at future very large neutrino detectors. |
| <b>A.M. Guler</b>    | SHIP: Search for Hidden Particles at CERN.                                       |
| <b>Y. Pezeshkian</b> | Pentagon arrangement for Alborz-I observatory.                                   |
| <b>B. Dev</b>        | Hints of New Physics in the Resonance Searches at the LHC.                       |
| <b>A. Rezaei</b>     | Self Interacting Vector Dark Matter.   |
| <b>Q. Exirifard</b>  | On the deviation from the Riemann Geometry as MOND/Dark Matter.                  |