

# Swiss COSMO User Workshop

## 18 January 2016

### Goal

The Swiss COSMO User Workshop is intended as a platform to meet other COSMO users and get to know each other's work. This year's program consists of short talks by new COSMO users introducing themselves and their work followed by longer presentations. The main topics include technical aspects of the COSMO model, comparisons with observations and climate applications.

We hope that you will enjoy this lively mix in an informal and interactive atmosphere!

### Location

MeteoSwiss, Operation Center 1, Zürich airport, Room 5-331

### Program

|              |                |  |
|--------------|----------------|--|
| 10:30        | - 10:35        | Andreas Pauling, MeteoSwiss<br><b>Welcome and general information</b>  |
|              |                | <i>New COSMO User Introductions</i>  |
| 10:35        | - 10:40        | Stefan Rüdisühli, IAC, Atmospheric Dynamics group  |
| 10:40        | - 10:45        | Simona Trefalt, MeteoSwiss, and Uni Bern, Mobiliar Group for Climate Impact Research   |
| 10:45        | - 10:50        | Pascal Spörri, C2SM  |
| 10:50        | - 10:55        | Christophe Charpilloz, MeteoSwiss  |
| 10:55        | - 11:00        | Valentin Clément, C2SM   |
|              |                | <i>Technical contributions</i>   |
| 11:00        | - 11:15        | Xavier Lapillonne, MeteoSwiss<br><b>Status of the GPU COSMO version</b>  |
| 11:15        | - 11:30        | Daniel Leuenberger, MeteoSwiss<br><b>Progress of the COSMO-NExT project</b>  |
| 11:30        | - 11:45        | Christina Klasa, IAC, Atmospheric Dynamics group<br><b>Stochastic physics effects in COSMO E: On the sensitivity to the synoptic situation</b> |
| 11:45        | - 12:00        | Joseph Charles, CSCS<br><b>Improving the Energy- and Time-to-solution of COSMO-ART</b>   |
| <b>12:00</b> | <b>- 13:30</b> | <i>Lunch</i>   |

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|--------------|-----------------|--|
|              |                 | <i>Using COSMO with observations</i>   |
| 13:30        | - 13:45         | Hélène Barras, Uni Bern, Mobiliar Group for Climate Impact Research<br><b>Verification of extreme wind gusts in COSMO-2 (WIP)</b>  |
| 13:45        | - 14:00         | Tobias Necker, LMU Munich, Hans-Ertel-Centre for Weather Research, Data Assimilation Branch<br><b>Assimilation of 2m relative humidity in COSMO/KENDA</b>                |
| 14:00        | - 14:15         | Daniel Wolfensberger, EPFL, Environmental Remote Sensing Laboratory group<br><b>Comparison of COSMO simulations with high-resolution polarimetric radar measurements</b> |
|              |                 | <i>Climate applications of COSMO</i>   |
| 14:15        | - 14:30         | Adel Imamovic, IAC, Climate and Water Cycle group<br><b>Soil-moisture and topographic impacts on summertime convection initiation</b>                                    |
| 14:30        | - 14:45         | David Leutwyler, IAC, Climate and Water Cycle group<br><b>Towards European-scale convection-resolving climate simulations</b>  |
| 14:45        | - 15:00         | Davide Panosetti, IAC, Climate and Water Cycle group<br><b>Simulations of thermally-driven orographic convection across the 'gray zone'</b>                              |
| <b>15:00</b> | <b>- 15:30</b>  | <i>Coffee Break</i>  |
| 15:30        | - 15:45         | Stefanos Mystakidis, IAC, Land-Climate Dynamics group<br><b>The terrestrial carbon cycle in the RESM COSMO-CLM2</b>  |
| 15:45        | - 16:00         | Stephan Henne, EMPA<br><b>Greenhouse Gas Simulation with COSMO - CLM2 and FLEXPART COSMO</b>   |
| 16:00        | - 16:15         | Gianluca Mussetti, EMPA<br><b>Urban climate simulations with COSMO and different parameterizations of the urban canopy</b>   |
| 16:15        | - 16:30         | Olga Henneberg, IAC, Atmospheric Physics group<br><b>Mixed phase clouds at the Jungfrauoch - The trajectory perspective</b>  |
| <b>16.30</b> | <b>Open end</b> | <i>Apero</i>   |