INTERNATIONAL WORKSHOP ON URBAN PLUVIAL FLOOD MODELLING

Monday 6th October 2014, 9:15 a.m. to 5:30 p.m.

Met Office, FitzRoy Road, Exeter, Devon, EX1 3PB, UK – Conference Room 1

- **09:15 – 09:45: Arrival, coffee and tea**

- **09:45 – 10:00: Welcome and introduction** – Susana Ochoa-Rodríguez & Marie-Claire ten Veldhuis

- **10:00 – 11:30: Session 1* - Approaches to the modelling of urban storm water drainage systems and urban pluvial flooding**

    – Multi-Hydro: A multi-component physically-based model for detailed urban pluvial flood modelling – Julien Richard & Agathe Giangola-Murzyn, École des Ponts PariTech, France

    – Fully-distributed vs. Semi-distributed urban drainage models – Rui Pina & Susana Ochoa-Rodríguez, Imperial College London, UK

    – Application of a three-dimensional unstructured-mesh finite-element urban pluvial flooding model and comparison with two-dimensional approaches - Ting Zhang, Imperial College London, UK

    – 3Di - 3-Dimensional high resolution surface water flood model: an application to the city of Amsterdam - Wytze Schurrmans, Nelen & Schuurmans B.V., The Netherlands

- **11:30 – 11:45: Coffee break**

- **11:45 – 12:55: Session 2* - Approaches and techniques for rapid urban pluvial (surface water) flood modelling**

    – 1D, 2D and hybrid surface flow models - Nuno Simões, University of Coimbra, Portugal & Damian Murlà Tuyls, KU Leuven, Belgium

    – Formulation of a fast 2D urban pluvial flood model using a cellular automata approach – Albert Chen, University of Exeter, UK

    – A flexible hydrodynamic modelling framework for GPUs and CPUs: Application to urban flood events – Luke Smith, New Castle University, UK

- **12:55 – 13:45: Lunch**

- **13:45 – 15:15: Session 3* - Urban drainage/pluvial flood model calibration, verification and uncertainty estimation:**

    – Model uncertainty analysis by variance decomposition - Patrick Willems, KU Leuven, Belgium

    – Improving uncertainty estimation in urban hydrological modelling by statistically describing bias – Dario del Giudice, Eawag, Switzerland

    – Real time calibration of urban drainage models – Soren Thorndahl, Aalborg University, Denmark

    – Good practices for enhancing the verification process – Alex Grist, Richard Allitt Associates, UK

- **15:15 – 15:30: Coffee break**

- **15:30 – 17:00: Session 4* - Operational urban pluvial flood models for real time applications**

    – Experiences and challenges in the implementation of InfoWorks ICM Live for real time surface water flood forecasting in Leuven, Belgium – Stefan Kroll, Aquafin, Belgium

    – Real time modelling of sewer systems in London – William Neale, Thames Water, UK

    – "Real-time operational system for surface water management in the Bièvre Valley, Île-de-France" – Laurent Monier, Veolia EAU DTP

    – Surface water flood forecasting and guidance in the UK – Jon Millard, Flood Forecasting Centre, UK

- **17:00 – 17:30: Conclusions & Close**

- **17:45 – 18:45: Guided tour to the Flood Forecasting Centre (open to all workshop participants and RainGain partners)**

*Talks will be 15 min long and there will be a 30 min interactive discussion at the end of each session
** In this document, the terms urban pluvial flooding and surface water flooding are used interchangeably