

# ***Joint CEE/ORE/IPRC Seminar***

**January 9<sup>th</sup>, 2015 at 3:00 pm**

**Holmes 244**

## **Third Generation Wave Models Based on Observational Physics**

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Major update of the physics of the third generation models will be presented. The new source terms for wind input, whitecapping dissipation, interaction of waves with adverse winds (negative input) and swell attenuation have been developed and implemented in WAVEWATCH-III and SWAN models. Physics and parameterisations for the new source functions are based on observations, which allowed us to reveal features and processes previously unknown and not accounted for in the default, largely speculative physics. The new versions of the models have undergone extensive testing by means of academic tests, regional and global wave hindcast, tropical cyclone modelling.