WS3.1: Comfort in Ventilated Spaces.
Chairs: Jarek Kurnitski and Adrian Pitts

This workshop is dedicated to comfort in highly ventilated spaces. Such spaces are often in retail stores, where ventilation in high rooms may or may not be used for heating and cooling purposes (all air systems or other systems), or in transition spaces (foyers, lobbies, corridors, atriums, etc) in other non-residential buildings. In highly ventilated spaces there is normally a higher than average level of air movement; avoiding stagnant zones and controlling stratification are issues in varying conditions. Another common area is in comfort for warm humid climates where high ventilation rates are commonly used. In such circumstances the convective effect is much enhanced and will impact on the heat transfer from the body. Because of the high ventilation rate the amounts of energy required to maintain comfort can be high (both for heating and cooling); one option may be to compensate for lower (or higher) air temperatures by use of modified radiant temperature so as to balance the body heat flow. But such radiant impacts and asymmetries can have their own negative impacts. The workshop will discuss the occupant perception and other comfort parameters in highly ventilated spaces or in those where radiant temperature is used to attempt to compensate for the air temperature. Among parameters under interest, the impact of odours on occupant perception of ventilation needs will also be explored.