



Virtual CFD Manikins

- The Development of CFD Manikins for the Prediction of Thermal Comfort and Air Quality

by

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Aim of the Forum

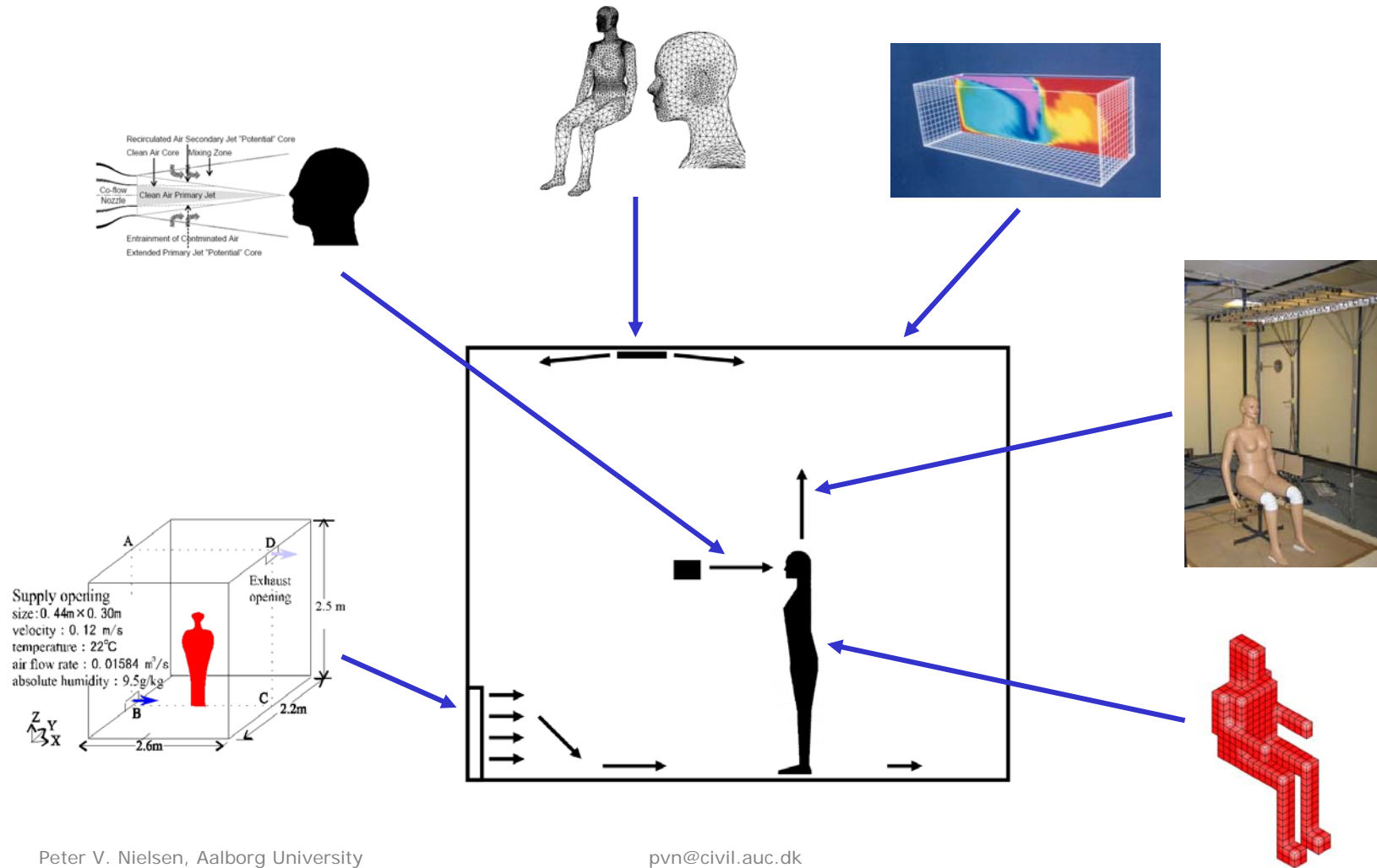
It is the aim of the forum to discuss the **layout and quality of a CFD manikin** optimised to solve the different problems in research and design work.

The discussion at the Indoor Air 2008 conference shows that it will be **necessary to distinguish between different strategies** in the design of a CFD manikin:

- a **large number of people** in a large space, etc.
- a computer-demanding problem with **many details** such as movement, etc.

Discussion Issues

- Measurement of local thermal comfort or development of a thermal comfort index by a detailed CFD manikin
- Movements of a CFD manikin
- The use of a CFD manikin for the development of personal environmental control systems
- Breathing function
- Simulation of cross infection with particles or gas
- Simulation of the upper airways
- Flow around a person and necessary details of a CFD manikin
- The optimal CFD manikin for a given research or design work





Speakers

Giving a Short Introduction to the Discussion

H. Ezzat Khalifa, STAR Center for Environmental Quality Systems, Syracuse University, USA

Yuguo Li, The University of Hong Kong, China

Shinsuke Kato, The University of Tokyo, Japan