

Abstract Submitted  
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**Flow measurements in indoor office environment** BALA VARMA DATLA, SRIKAR KALIGOTLA, MARK GLAUSER, Syracuse University — Experiments are being conducted to study the nature of flow near the human breathing zones. PIV measurements are being made around two thermal manikins and a table placed in an office space provided with displacement ventilation. The velocity profiles at various positions near the breathing zone and at various instants of the breathing cycle are being studied to understand how the breathing influences the air flow and mixing near the breathing zone, in a flow that is primarily driven by natural convection. These results can help us understand the transport of freely suspended particulate matter in indoor environments into the breathing zone and be used for validating computer models for indoor environments.

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