

CoE-MaSS weekly seminar series

THE DST-NRF CENTRE OF EXCELLENCE IN MATHEMATICS AND
STATISTICAL SCIENCES (CoE-MaSS) WOULD LIKE TO PRESENT
A RESEARCH SEMINAR BY

Prof Ebrahim Momoniat

*(Deputy Director of the DST-NRF CoE-MaSS, and
HoS of Computer Science and Applied Mathematics at Wits)*



“A review on thin film flow on a rotating disk”

In this talk we review research related to the spreading of a thin film on a horizontal surface by centrifugation. We start by looking at the work of von Karman on the classic problem of viscous flow above a flat rotating disk in a cylinder of infinite extension. We then review the work of Emslie et al. who derive a first-order quasilinear partial differential equation modelling the free surface of a thin film spreading on a rotating disk where surface tension and gravity effects have been ignored. We next consider the work of Momoniat and Mason, and Myers and Charpin on the effects of Coriolis force on the spreading of a thin film on a rotating disk. We finally consider the work undertaken by Dandapat who investigated the spreading of a thin film on a disk rotating with a non-uniform angular velocity.

Friday, 12 June 2015

10h30-11h30

Videoconferencing Facility, First Floor

Mathematical Sciences Building, Wits West Campus

*Tea will be served in the MSB Staff Room on the Upper Ground Floor
from 09h45-10h30 for those that are attending the seminar at Wits.*

How to connect to this seminar remotely:

You can connect remotely via Vidyo to this research seminar by clicking on this link:

<http://wits-vc.tenet.ac.za/flex.html?roomdirect.html&key=y0SSOwFsvsidbzg4qFdWXvvQtyl>

and downloading the Vidyo software before the seminar. You can join in the virtual venue (called “CAM Seminar Room” on Vidyo) to check your settings beforehand, from 10h00-10h15.

Important videoconferencing netiquette: Once the seminar commences, please mute your own microphone so that there is no feedback from your side into the virtual room. During the Q&A slot you can then unmute your microphone if you have a question to ask the speaker.