

# MATHEMATICS IN INDUSTRY STUDY GROUP 2022

Monday 7 February to Friday 11 February 2022

## ONLINE PROGRAMME

Monday 7 February 2022	
9:00 – 9:15	Official Opening and Welcome Venue: Main Zoom room Chair: David Mason Welcome address: Professor Nithaya Chetty Dean of Science University of the Witwatersrand
9:15 – 9:30	Technology: Diane Dowejko
9:30 – 12:30	Problem Presentations Venue: Main Zoom room Chair: David Mason Each Industry Representative has available 30 minutes including questions
9:30 – 10:00	<ul style="list-style-type: none"><li>• Richard Loubser Diffuser optimum imbibition</li></ul>
10:00 – 10:30	<ul style="list-style-type: none"><li>• Precious Shabalala Tourism sector recovery plan for airlines</li></ul>
10:30 – 11:00	<ul style="list-style-type: none"><li>• Tim Myers and Alba Cabrera Codony Scaling up from experiment to industry</li></ul>
11:00 – 11:30	Virtual Morning Tea Venue: Main Zoom Room

11:30 – 12:00	Chair: Syamala Krishnannair
12:00 – 12:30	<ul style="list-style-type: none"> <li>• Denis Ndanguza Movement of bubbles in a tube for methane extraction in Lake Kivu</li> <li>• Stephan Visagie and Montaz Ali The drop shunting problem</li> </ul>
12:30 – 13:00	<p>Chair: David Mason</p> <p><i>Formation of study Groups</i></p> <p>Venue: Main Zoom room</p> <p>Formation of five Study Groups</p> <p>Allocation of breakout rooms</p>
13:00 – 14:00	<p>Lunch</p> <p>Venue: Main Zoom room</p>
14:00 – 16:00	<p>Study Group meetings</p> <p>Venues: Breakout rooms</p> <p>Introductions</p> <p>Practice of software</p> <p>General problem discussions</p> <p>Identification of subtasks and subgroups</p> <p>Extra breakout rooms can be allocated to a Problem if there are subgroups</p>
16:00 – 16:30	<p>Virtual afternoon tea</p> <p>Venue: Main Zoom room</p>
16:30 – 17:30	<p>Study Group meetings</p> <p>Venues: Breakout Rooms</p> <p>Group/subgroups work collaboratively</p>
17:30 – 18:00	<p>Venue: Breakout rooms</p> <p>Whole Study Group meets</p> <p>Subgroups report on progress</p> <p>Group discussion</p>

18:00	Day closes although work may continue late into the evening
<b>Tuesday 8 February and Wednesday 9 February 2022</b>	
9:00 – 11:00	Study Group meetings Venue: Breakout rooms  Whole group meets to plan the work of the day. Subgroups move into secondary breakout rooms Group/subgroups work collaboratively
11:00 – 11:30	Virtual morning tea Venue: Main Zoom room
11:30 – 13:00	Study Group meetings Venues: Breakout rooms Collaborative work continues
13:00 – 14:00	Lunch Venue: Main Zoom room
14:00 – 16:00	Study Group meetings Venues: Breakout rooms Collaborative work continues Preparation of Progress Presentation
16:00 – 16:30	Virtual afternoon tea Venue: Main Zoom room

16:30 – 18:00	<p>Progress Presentations  Venue: Main Zoom room  Chair: Tuesday      Montaz Ali  Wednesday    Tim Myers</p> <p>10 minutes presentation + 5 minutes questions</p> <ul style="list-style-type: none"> <li>• Diffuser optimum imbibition</li> <li>• Tourism recovery plan for airlines</li> <li>• Scaling up from experiment to industry</li> <li>• Movement of bubbles in a tube</li> <li>• The drop shunting problem</li> </ul>
18:00	Day closes although work may continue late into the evening
<b>Thursday 10 February 2022</b>	
9:00 – 11:00	<p>Study Group meetings  Venues: Breakout rooms</p>
11:00 – 11:30	<p>Virtual morning tea  Venue: Main Zoom room</p>
11:30 – 13:00	<p>Study Group meetings  Venues: Breakout rooms</p>
13:00 –14:00	<p>Lunch  Venue: Main Zoom room</p>
14:00 – 16:00	<p>Study Group meetings  Venue: Breakout rooms</p>
16:00 – 16:30	<p>Virtual afternoon tea  Venue: Main Zoom room</p>

16:30 – 18:00	Study Group meetings Venue: Breakout rooms Preparation of Report-back Presentation
18:00	Day closes although work may continue late into the evening
<b>Friday 11 February 2022</b>	
9:00 – 12:00	Report back session to Industry Venue: Main Zoom room  Moderators report on progress (25 minutes) Industry Representatives comment on progress (5 minutes)  Chair: Masood Khlique
9:00 – 9:30 9:30 – 10:00 10:00 – 10:30	<ul style="list-style-type: none"> <li>• Diffuser optimum imbibition</li> <li>• Tourism sector recovery plan for airlines</li> <li>• Scaling up from experiment to industry</li> </ul>
10:30 – 11:00	Virtual morning tea Venue: Main Zoom room
11:00 – 11:30 11:30 – 12:00	Chair: Syamala Krishnannair <ul style="list-style-type: none"> <li>• Movement of bubbles in a tube for methane extraction in Lake Kivu</li> <li>• The drop shunting problem</li> </ul>
12:00 – 12:30	Closing Venue: Main Zoom Room Chair: David Mason <ul style="list-style-type: none"> <li>• Half-Wits Mug</li> <li>• Thank you ZOOM Platform and MISG Organising Committee</li> </ul>