## REPORT ON THE INTERACTIVE SESSION WITH DR. SAI JAGAN MOHAN

On 7th of June 2023, we had a remarkable session with Dr Sai Jagan Mohan esteemed professor who has taught in BITS Pilani and has done his BTech MTech from IIT Bombay along with sir VPD, conducted in MAHSS discussing on the topic of Dimension Analysis, though the time was short, we all thoroughly enjoyed this session with him.

During the session, participants actively engaged with Dr. Sai Jagan Mohan, asking questions, and seeking clarification on various aspects of dimension analysis and other related topics and Dr. Mohan patiently addressed each query, providing insightful explanations and practical examples to further enhance our understanding.

Dr. Sai Jagan Mohan shared captivating insights about his life in the Royal Indian Military College, highlighting his passion for physics. He emphasized the often-overlooked law of dimension analysis, explaining its purpose and significance through two notable experiments: "deriving the time period for a pendulum" and "observing the change in pressure of a liquid relative to the length of a pipe". These experiments demonstrated importance of Dimension Analysis in physics experiment.

Dr. Mohan proceeded to discuss the benefits of Dimension Analysis, emphasizing how it reduces the need for conducting numerous experiments. He also introduced the fundamental law of dimension analysis, stating that "The laws of physics are always invariant to scale. Additionally, he highlighted how symmetry simplifies problems, making them more manageable, though not necessarily solving them outright. Additionally, he provided an insightful explanation of Bernoulli's theorem.

During his presentation, Dr. Mohan also touched upon various engaging topics. He also told us about the documentary "Awe and Shock" and BBC's documentary on volatile chemistry. He mentioned the about notable figure, Shankar Ramamurti.

He also spoke the advantages of studying at NIT, such as the opportunity to interact with individuals from diverse cultural backgrounds. Furthermore, Dr. Mohan discussed the significance of pursuing mathematics, providing valuable information about CMI and ISI for those interested in furthering their studies in the field. He also highlighted the importance of mathematics and its applications in various domains.

Overall, the interactive session with Dr. Sai Jagan Mohan on dimension analysis was highly informative and engaging and an enlightening experience, leaving participants with a deeper understanding of the subject and a different perspective in physics. His personal anecdotes and enthusiasm for the subject contributed to a memorable and enlightening experience for all attendees. We look forward to future opportunities to learn from such distinguished speakers and continue our exploration of diverse topics in the field of science and mathematics.

We would like to Dr. Sai Jagan Mohan for graciously sharing his time, knowledge, and expertise with us. His enthusiasm on physics and expertise made the session truly engaging and

impactful. We are grateful for the valuable insights gained from his presentation and the interactive discussion.

We would also like to thank Sir VPD and for giving us this marvellous opportunity to interact with such eminent and zealous personalities that give us an opportunity to invigorate our minds and the Aryaans staff for making this session possible.