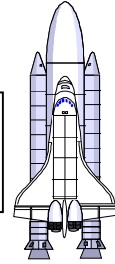
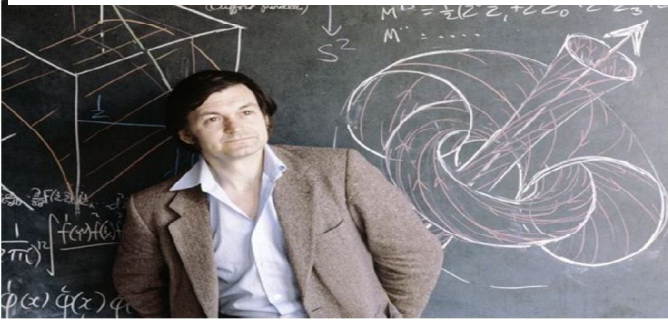


PHYSICS**KALPANA****25****2020-2021**

**SIR ROGER PENROSE'S NOBEL PRIZE IN
PHYSICS AND SURPRISE IT BRINGS**



The announcement of this year's Nobel Prize in Physics came as a surprise. Two astrophysicists, Reinhard Genzel and Andrea Ghez, shared half of the prize "for the discovery of a supermassive compact object at the centre of our galaxy". The other half, the real surprise: it belonged to Sir Roger Penrose. The award does not say as much about his accomplishments as it does about the Nobel Prize itself.



Penrose is a phenomenal mathematical physicist, a unique thinker in every topic he gets involved in. His powerful visual mind has led him to leave his fingerprints in

practically all the areas he has worked. These fingerprints range from developments in notation and invention of ingenious diagrams to shaping the full theoretical framework used to understand the phenomena. Elaborating a new notation in mathematics is far more than creating new symbols; it is using representations to aid our brains to think, in a similar way we use our language as an aid to form concepts and operate them. Not only do diagrams help with visualisation of certain properties but also invite the formulation of questions and provide tools for addressing them. Notation and diagrams are both the effect and the cause of Penrose's distinctive geometrical mind: they come as the product of his recreation of established theories and propel the continuation of