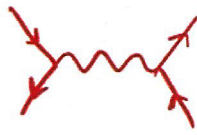


# LARGE HADRON COLLIDER!

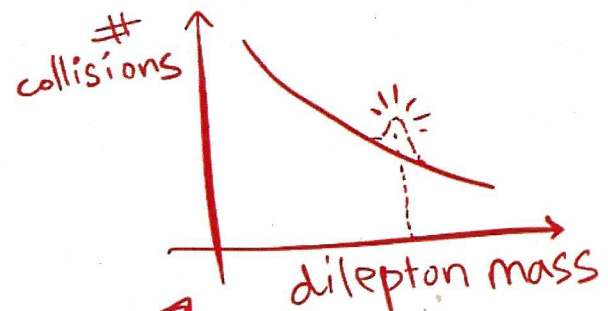
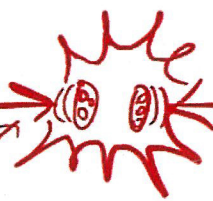
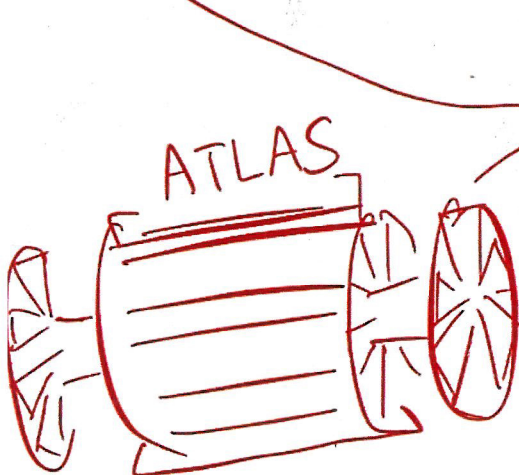
## CERTIFICATE OF ACHIEVEMENT



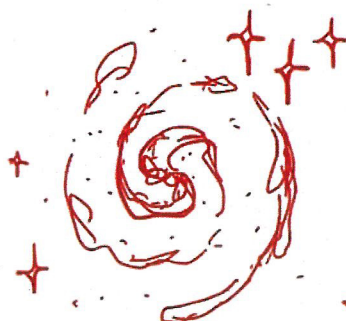
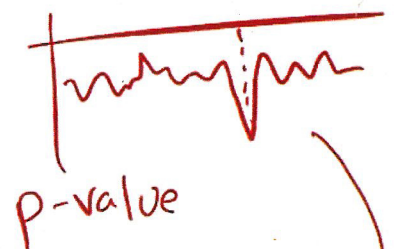
Presented to

**SYED ALI ASGHAR**

as a **Second Place Winner** among first-year students in the competition held in Particle Physics Outreach Event on 3rd September 2021.



Please accept our humble thanks and our heartfelt appreciation for attending this event on the behlaf of the organizing committee of Particle Physics Outreach Event in Pakistan.



Dark matter?

$$\begin{aligned} \mathcal{L} = & -\frac{1}{4} F_{\mu\nu}^a F^{a\mu\nu} \\ & - \bar{\psi}_f (i \not{D} - m_f) \psi_f \\ & + (D^\mu \phi)^\dagger (D_\mu \phi) \\ & - \mu^2 \phi^\dagger \phi - \frac{\lambda^2}{2} (\phi^\dagger \phi)^2 \\ & + ?? \end{aligned}$$

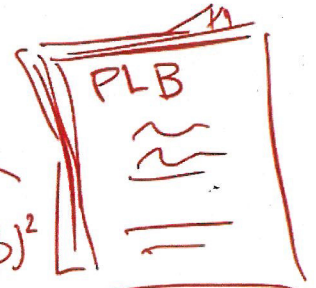


Illustration done by Dr Etienne Dreyer