

## **Colloquium**

### **Story of Spin half Particles and new mass dimension one fermions**

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The story is about an unexpected theoretical discovery of new fermions that do not satisfy Dirac equation, and yet are fermionic, local, and the formalism is Lorentz covariant. The new fermions have mass dimension one, and their only dominant interactions are with the Higgs, Gravity, and quartic self interaction. Thus the new fermions are a first principle dark matter candidate. How this comes about shall be covered at a conceptual level with minimal technical details in a chalk and board talk.

***Wednesday, Aug 23<sup>rd</sup> 2017***

***04:00 PM (Tea/Coffee at 03:45 PM)***

***Auditorium, TIFR (FReT-B)***