

*Speaker* : Snigdhayan Mahanta  
*Title* : Cyclic extensions over  $\mathbb{F}_1$

*Abstract* :

There is a notion of Galois theory of rings due to Auslaender-Goldman, whose homotopical counterpart was worked out recently by Rognes. Using the Toen-Vaquié approach which interrelates schemes over  $\mathbb{F}_1$ ,  $\mathbb{Z}$ ,  $\mathbb{S}_1$  and  $\mathbb{S}$ . I will discuss a possible notion of cyclic extensions over  $\mathbb{F}_1$ .