Contribution ID: **45**   Type: **Contributory Talks**

Gravitational Lensing Bound on The Transition Redshift

Thursday 29 January 2015 16:00 (15 minutes)

In this paper, we use the approach which is independent on matter, to study the accelerated expansion of the Universe. We reconsttruct the deceleration parameter, q(z), to put constrain on the transition redshift (z_t). Transition redshift is the value of redshift at which the expansion of the Universe switches from decelerated to accelerated phase. We reconstruct three different form of deceleration parameter: $q_I(z) = \frac{1}{2} + \frac{q_0}{(1+z)^2}$, $q_{II}(z) = q_1 + q_2 z$, and q_{III} (z) = q_3 + q_4 log(1 + z) by using the recent data of age of galaxies and strong lensing. A joint analysis of these two datasets indicate the higher value of the transition redshift $z_t > 1$.

Author: Ms RANI, Nisha (Delhi University)

Co-authors: Prof. MUKHERJEE, Amitabha (Delhi University); Dr JAIN, Deepak (Delhi University); Prof. MAHAJAN, Shobhit (Delhi University)

Presenter: Ms RANI, Nisha (Delhi University)

Session Classification: Dark Energy-II