Seminario

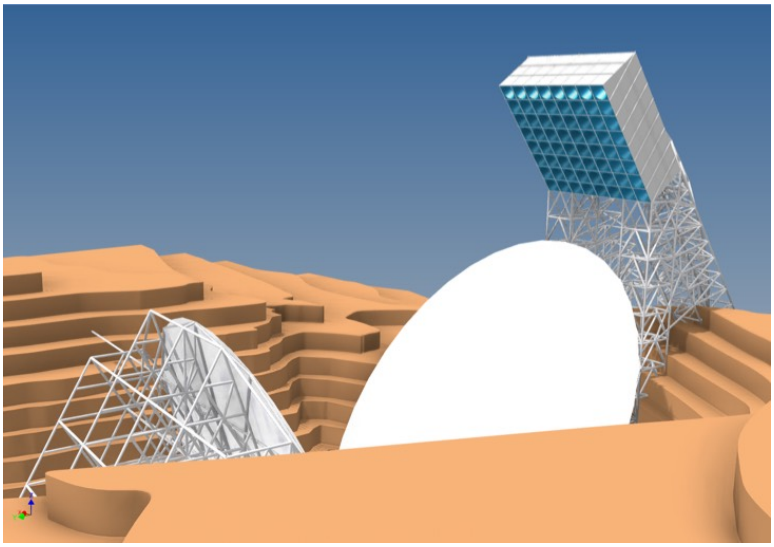
Proyecto BINGO

un radiotelescopio para Cosmología a instalar en Uruguay

Lunes 2 de Mayo, 13:30 – Salón de Seminarios del Instituto de Física, Facultad de Ciencias

Clive Dickinson - Jodrell Bank Centre for Astrophysics, University of Manchester Manchester (UK)
junto al BINGO Team:

- Universidade de Sao Paulo and Instituto Nacional de Pesquisas Espaciais (Brasil)
- ETH (Swiss Federal Institute of Technology), Zurich (Suiza)
- UdelaR (Uruguay)



BINGO is a novel single-dish total-power telescope that will map the redshifted atomic hydrogen, using the 21cm line, in a $\sim$ 15 degree strip, at frequencies of 960–1260 MHz (z = 0.12–0.48).
BINGO will have the sensitivity to accurately measure the HI power spectrum and to detect Baryon Acoustic Oscillations (BAOs) for the first time at radio wavelengths. This will provide complementary cosmological information to existing surveys and will measure the acoustic scale to ≈ 2 % precision.
The BINGO project has been funded and the construction of Phase I is currently under preparation in Uruguay. It will be installed in Minas de Corrales (Dept. Rivera) in an abandoned quarry.
We provide an update on BINGO including an improved two-mirror optical configuration, final site selection, component separation technique and cosmological parameter constrains.