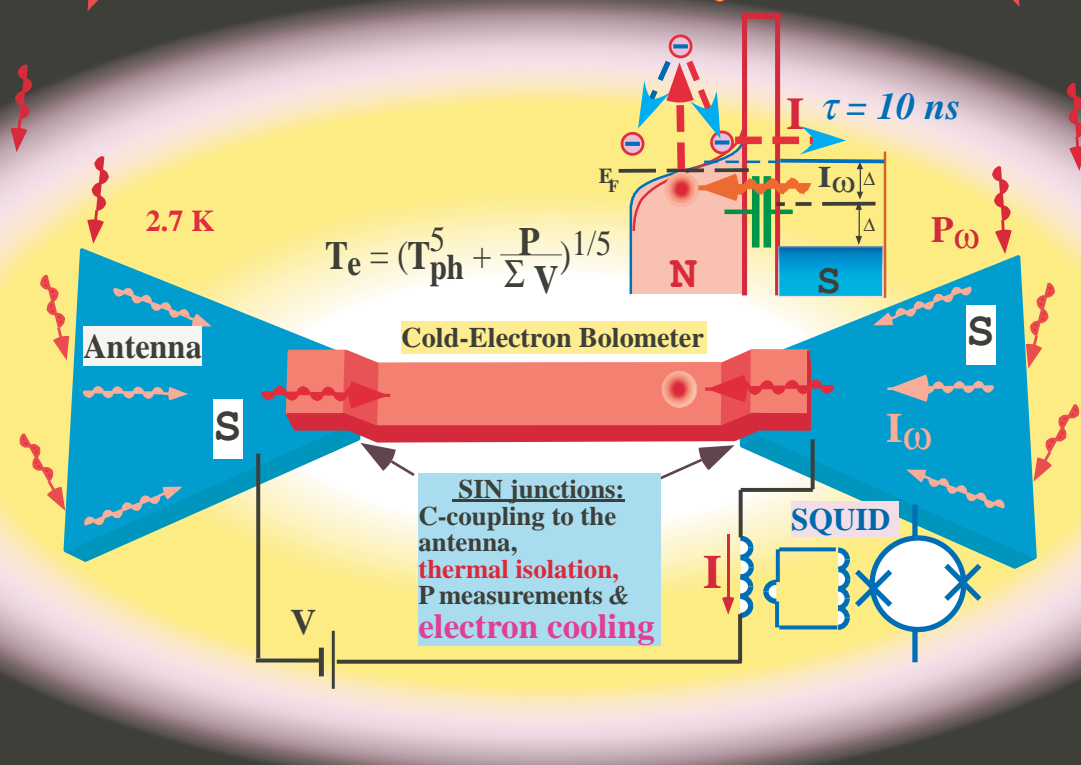
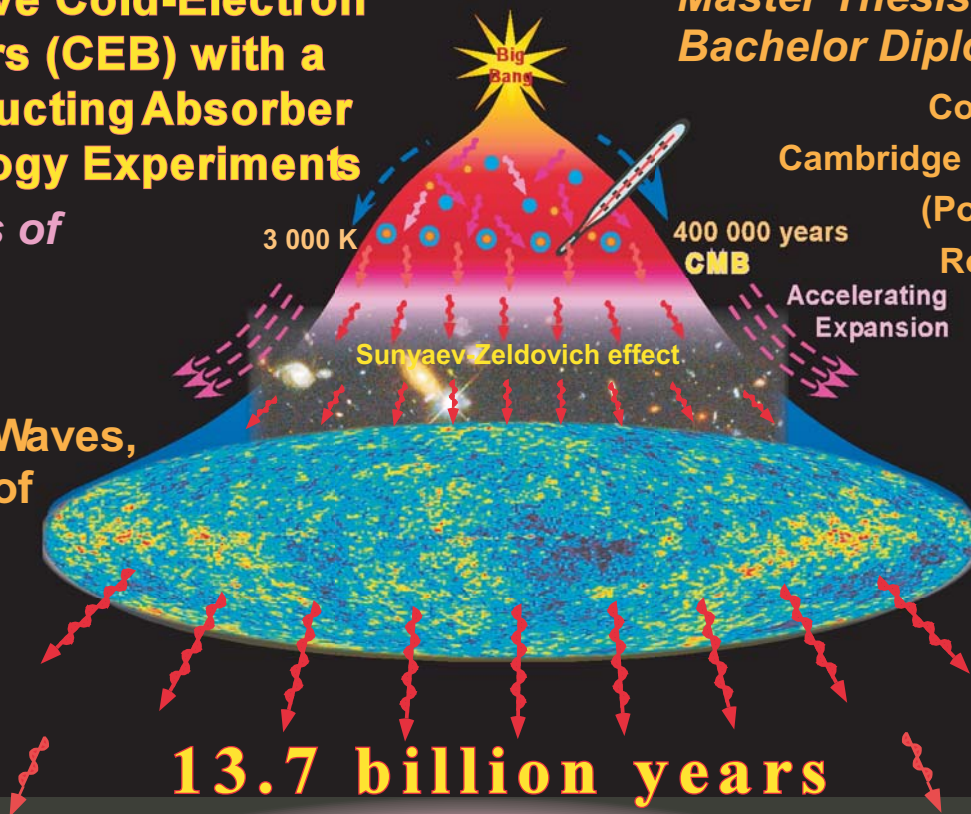


Ultrasensitive Cold-Electron Bolometers (CEB) with a Superconducting Absorber for Cosmology Experiments

Master Thesis,
Bachelor Diploma Project

Cooperation with
Cambridge and Oxford Un
(Project CLOVER),
Rome University
(Projects
BOOMERANG
and OLIMPO)

Great Puzzles of
the Century:
Dark Energy ,
Dark Matter ,
Gravitational Waves,
Acceleration of
the Universe!



A New Generation of Detectors is needed for
advanced Cosmology Experiments!

- Fabrication of CEB nanobolometers using MC2 clean-room facilities
- DC and RF tests using cryogen-free refrigerators of Oxford Instruments
- Comparison with theoretical models
- Final RF tests in Cambridge and Oxford Universities (project CLOVER) and in Rome University (balloon projects BOOMERANG & OLIMPO)

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