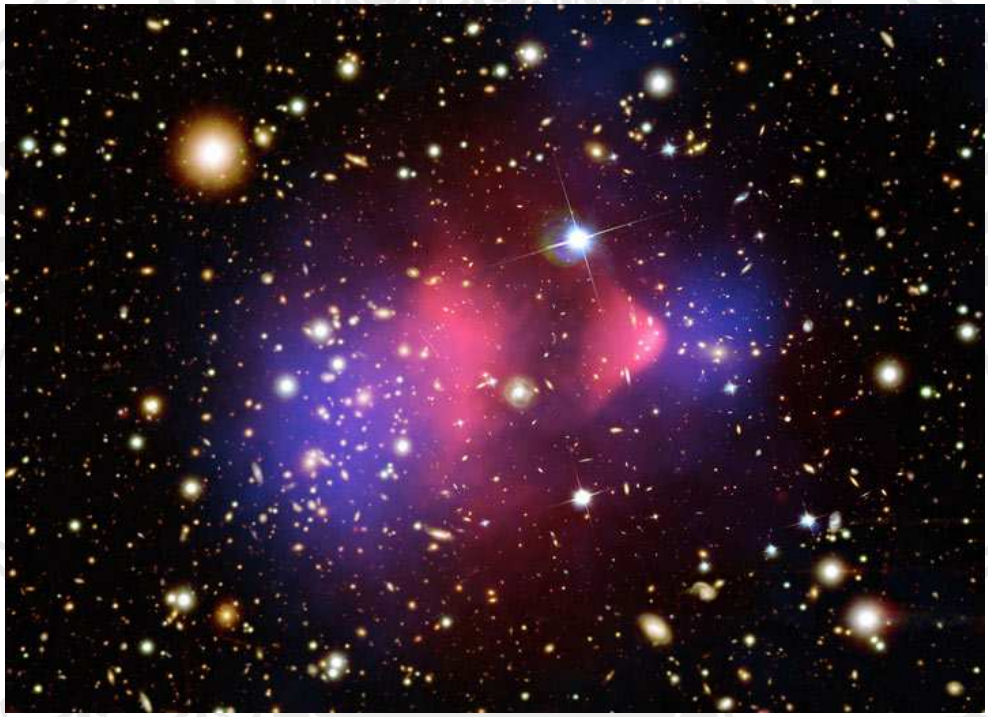
PHYSIKALISCHES KOLLOQUIUM

AM 27. JUNI 2011 UM 17 UHR C.T.

IM GROßEN HÖRSAAL



QUANTUM DARK MATTER

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Astronomical observations show that most of the mass in the Universe is in the form of Dark Matter. Understanding the origin and nature of Dark Matter is one of the most urgent and challenging problems of modern science. Its solution will require new ideas that are likely to revolutionize physics, astrophysics, and other natural sciences. Standard proposals to explain Dark Matter that are based upon unification of the fundamental forces, new forces and new particles in the standard model will be briefly reviewed. A special emphasis will be given to the so-called quantum ('fuzzy') Dark Matter and a search for new fundamental equations of physics that may describe Dark Matter.