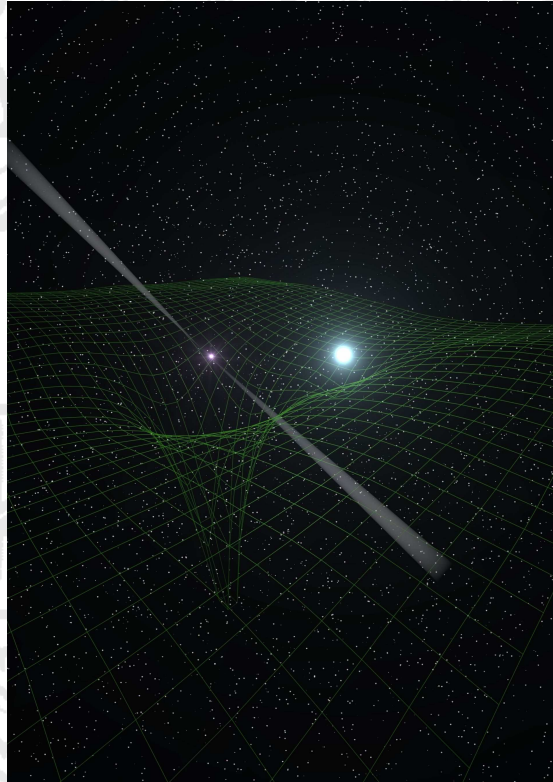


# PHYSIKALISCHES KOLLOQUIUM

AM 11. FEBRUAR 2013 UM 17 UHR C.T.

IM GROßEN HÖRSAAL



## NEARLY 100 YEARS AFTER GENERAL RELATIVITY: WAS EINSTEIN RIGHT?

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We are only three years away from celebrating the centenary of Einstein's theory of general relativity (GR). Nearly a hundred years later, efforts in testing GR and its concepts are still being made by many colleagues around the world, using many different approaches. To date GR has passed all experimental and observational tests with flying colours, but in light of recent progress in observational cosmology in particular, the question of as to whether alternative theories of gravity need to be considered is as topical as ever.

While we are all very much looking forward to the first direct detection of gravitational waves with ground-based (and hopefully, eventually, space-based) detectors, it happens that nature provides us with an almost perfect laboratory to test the strong-field regime - in the form of binary radio pulsars. This talk will present some of the recent results in the tests of general relativity and alternative theories of gravity and outlines what we can expect in the future.