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## Probing gravity at cosmic scales

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# Probing Gravity at Cosmic Scales

PROEFSCHRIFT

TER VERKRIJGING VAN  
DE GRAAD VAN DOCTOR AAN DE UNIVERSITEIT LEIDEN,  
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VOLGENS BESLUIT VAN HET COLLEGE VOOR PROMOTIES  
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Simone Peirone

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Cover: Negative of the 1919 solar eclipse taken from the report of Sir Arthur Eddington on the expedition to verify Einstein's prediction of the bending of light around the sun. This observation represents the first experimental test of General Relativity on solar-system scales. In the same way, this thesis reports the results of tests of General Relativity on the largest observational scales.

source: F. W. Dyson, A. S. Eddington, and C. Davidson, "A Determination of the Deflection of Light by the Sun's Gravitational Field, from Observations Made at the Total Eclipse of May 29, 1919".

*To Federica*



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