

Curriculum Vitae **Reinoud Jan Slagter**

Personal information:

Born: 9 September 1949 in Bussum, The Netherlands.

Email: info@asfyon.com

Web: www.asfton.com

Cell: 0031 643900550



Research:

Since 1980 researcher in the field of general relativity and cosmology at the university of Utrecht and Amsterdam. In 1998 founder of the independent research center ASFYON (=astronomisch fysisch onderzoek Nederland).

The subjects of research comprise: high-frequency perturbations using multiple-scale method --- $U(1)$ scalar-gauge field models on curved spacetimes - -- causality issues in general relativity --- topological defects such as cosmic strings --- rotating fields in general relativity --- evidence of cosmic strings from the alignment of quasar polarization axes ---warped spacetimes and conformal invariance.

Work:

- 1972-1974: assistant at univ. of Utrecht*
1974-2010: teacher in mathematics and physics
1980-1993: researcher at univ. of Utrecht and Amsterdam
1998- now: director ASFYON

Education:

- 1980-1986; Study theoretical physics at university of Utrecht. Master's thesis by Prof. G. 't Hooft on a subject in cosmology.*
- 1987: PhD at university of Amsterdam in theoretical physics*
Title: "Primordial High Frequency Perturbations in Cosmology"
- Promotors: Prof. E. v/d Heuvel (A'dam) Prof. K. Gaemers (NIKEV)*
- Co-promotor: Prof. G. 't Hooft (Utrecht)*

Publications: [see also ArXiv-publications]

Numerical solutions of high-frequency perturbations in Bianchi IX models *Astrophysical J.*, 268, 513 [1983]

Behavior of higher modes of gravitational waves and gauge-invariant density perturbations in Bianchi IX cosmological models *Astrophysical J.*, 286, 379 [1984]

High-frequency perturbations and gravitational collapse in gravity theory coupled with a Higgs field *Astrophysical J.*, 307, 20 [1986]

Gauge strings on Einstein-Rosen background *Gen. Rel. and Grav.*, 23, 991 [1991]

Approximate solutions of stationary gauge strings on the (r,z)-plane *Int. J of Mod. Phys. D*, 4, 267 [1995]

Time evolution and matching conditions of spinning gauge strings *Phys. Rev. D*, 54, 4873 [1996]

On the causal structure of spinning Einstein-Yang-Mills strings *Hadr. Journ.*, 21, 373 [1998]

Self-gravitating non-abelian cosmic string solution *Phys. Rev. D*, 59, 025009-1 [1998]

Gravitational waves from spinning non-abelian cosmic strings *Class. Quantum Grav.*, 18, 463 [2001]

Radiative non-abelian cosmic strings with negative cosmological constant *Class. Quantum Grav.*, 19, 115 [2002]

Stationary axially symmetric non-abelian rotating cosmic strings *Int. J of Mod. Phys. D*, 11, 619 [2002]

Melvin solution with a dilaton potential *Class. Quantum Grav.*, 21, 1 [2004]

On Ernst black holes with a dilaton potential *Mod. Phys. Lett. A*, 20, 1077 [2005]

A five dimensional spherically symmetric solution in Einstein-Yang-Mills theory with the Gauss-Bonnet term *Int. J of Mod. Phys. D.*, 18, 613 [2009]

Warped self-gravitating U(1) gauge cosmic strings in 5D *Int. J. of Mod. Phys. D*, 21, 1250060-1 [2012]

Why we don't see cosmic strings? *Int. J. of Theor. and Math. Phys.*, 2, 136 [2012]

Time evolution of a warped cosmic string *Int. J. of Mod. Phys. D*, 23, 1450066-1 [2014]

Evolution and dynamics of a matter creation model [Mon. Not. Roy. Astr. Soc.](#), [2016]

A new fate of a warped FLRW model with a $U(1)$ scalar gauge field [Found. of Phys.](#), 46, 1075 [2016]

Alignment of quasar polarizations on large scales explained by warped cosmic strings [J. Mod. Phys.](#), 7, 501 [2016]

Alignment of quasar polarizations on large scales explained by warped cosmic strings. Part II: the second order contribution [J. Mod. Phys.](#), 8, 163 [2016]

Nonlinear gravitational waves as dark energy in warped spacetimes [Universe](#), 3,11 [2016]

Evidence of cosmic strings by observation of the alignment of quasar polarization axes on Mpc scales [[ArXiv and submitted](#)]

5D warped spacetimes conformally revisited [[ArXiv and submitted](#)]