Bio

**BIO**

Robert V. Wagoner's scientific direction was established rather suddenly in 1960, when he attended a series of lectures on cosmology by the British astrophysicist Fred Hoyle. At the time, Wagoner was a mechanical engineering undergraduate at Cornell University, receiving his B.M.E. in 1961. Born and raised in Teaneck, New Jersey, his other major interest was golf, leading to a position on the Cornell team. He switched to physics while at Stanford University, receiving an M.S. in engineering science in 1962 and a Ph.D. in physics in 1965. He then worked as a postdoctoral fellow at Caltech, collaborating with William A. Fowler and Hoyle on the first complete calculation of the abundances of the elements produced in the primordial universe. After three years, he returned to Cornell as a faculty member in the astronomy department. Five years later, he returned to Stanford's physics department, where he is a professor of physics, emeritus and a member of the Kavli Institute for Particle Astrophysics and Cosmology.

**ACADEMIC APPOINTMENTS**

- Emeritus Faculty, Acad Council, Physics

**HONORS AND AWARDS**

- Visiting Fellow, Institute of Theoretical Astronomy, Cambridge University (1967, 1971)
- George Ellery Hale Distinguished Visiting Professor, University of Chicago (1978)
- Sherman Fairchild Distinguished Scholar, Caltech (1976)
- Fellowship, Guggenheim Foundation (1978)
- Fellowship, A.P. Sloan Foundation (1969)

**BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS**

- Fellow, American Physical Society (1965 - present)
- Member, American Astronomical Society (1966 - present)

**LINKS**

- My Personal Website: https://web.stanford.edu/dept/physics/people/faculty/wagoner_robert-%20-%20Copy.html

Research & Scholarship

**CURRENT RESEARCH AND SCHOLARLY INTERESTS**

Probes (accretion disks, ...) of black holes, sources and detectors of gravitational radiation, theories of gravitation, anthropic cosmological principle.
Teaching

COURSES

2016-17
• Black Holes and Extreme Astrophysics: PHYSICS 17 (Spr)

2015-16
• Black Holes and Extreme Astrophysics: PHYSICS 17 (Spr)

Publications

PUBLICATIONS

• Order out of Randomness: Self-Organization Processes in Astrophysics SPACE SCIENCE REVIEWS
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• Evidence for an Optical Low-frequency Quasi-periodic Oscillation in the Kepler Light Curve of an Active Galaxy The Astrophysical Journal
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• DISKOSEISMOLOGY AND QPOs CONFRONT BLACK HOLE SPIN ASTROPHYSICAL JOURNAL LETTERS
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• Corotation resonance and diskoseismology modes of black hole accretion disks ASTROPHYSICAL JOURNAL
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• Relativistic and Newtonian diskoseismology Conference on Jean-Pierre Lasota, X-Ray Binaries, Accretion Disks and Compact Stars
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• Normal modes of black hole accretion disks GEOPHYSICAL AND ASTROPHYSICAL FLUID DYNAMICS
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• Diskoseismology International Conference on Helioseismology, Asteroseismology and MHD Connections (HELAS II)
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• Global disk oscillation modes in cataclysmic variables and other newtonian accretors ASTROPHYSICAL JOURNAL
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• Astronomy - Heartbeats of a neutron star  *NATURE*
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• Conditions for steady gravitational radiation from accreting neutron stars  *ASTROPHYSICAL JOURNAL*
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• Relativistic diskoseismology. III. Low-frequency fundamental p-modes  *ASTROPHYSICAL JOURNAL*
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• Relativistic diskoseismology. II. Analytical results for c-modes  *ASTROPHYSICAL JOURNAL*
  Silbergleit, A. S., Wagoner, R. V., Ortega-Rodriguez, M.
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• Relativistic gravity and some astrophysical applications  *Summer School on Astroparticle Physics and Cosmology*
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• Relativistic diskoseismology  *Conference on Processes in Astrophysical Fluids on the Occasion of the 60th Birthday of Giora Shaviv*
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  Santiago, D. I., Kalligas, D., Wagoner, R. V.
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• **FROM THE EXPANSION OF SUPERNOVAE TO THE EXPANSION OF THE UNIVERSE**
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• **FROM THE EXPANSION OF SN-1987A TO THE EXPANSION OF THE UNIVERSE**
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