

- ² J. A. Wheeler clearly identified the Planck scale as appropriate to quantum gravity, bringing it to the wider attention of theorists: J. A. Wheeler, “Geons,” *Phys. Rev.* **97**, no. 2, 511-536 (1955). Reprinted in: J.A. Wheeler, *Geometrodynamics* (Academic Press, New York and London 1962).
- ³ Ronald J. Adler, “Gravity,” in *The New Physics for the Twenty-first Century*, edited by Gordon Fraser, (Cambridge University Press, Cambridge UK, 2006).
- ⁴ R. P. Feynman, “Lectures on Gravitation,” notes taken by F. Morinigo and W. G. Wagner (California Institute of Technology bookstore 1971).
- ⁵ The most well-known candidate is (super)string theory, for which a non-technical discussion is: Bryan Green, “Superstring Theory,” in *The New Physics for the Twentyfirst Century*, edited by Gordon Fraser, (Cambridge University Press, Cambridge UK, 2006). A technical set of notes is available online: G. tHooft, “String Theory Lectures,” www.phys.uu.nl/~thooft/lectures/stringnotes.pdf. A popular discussion including other approaches is: L. Smolin, “Three Roads to Quantum Gravity,” (Weidenfeld and Nicolson, London, 2000).
- ⁶ An up-to-date technical reference is: Daniele Oriti, “Approaches to Quantum Gravity,” (Cambridge Press, Cambridge UK 2009), in particular see the chapter by C. Rovelli, “The unfinished revolution,” in which he points out that the subject of quantum gravity dates back at least to: M. P. Bronstein, “Quantentheories schwacher Gravitationsfelder,” *Physikalische Zeitschrift der Sowietunion* **9**, 140 - ? (1936).
- ⁷ A list of quantum gravity theories online: en.wikipedia.org/wiki/Quantum_gravity
- ⁸ G. Amelino-Camelia, “Planck-scale Lorentz-symmetry Test Theories,” *arXiv:astroarXiv:astro-ph/0410076* (2004).
- ⁹ G. Amelino-Camelia, “Gravity-wave interferometers as quantum-gravity detectors,” *Nature* **398**, 216 - 218 (1999). G. Amelino-Camelia, ‘Quantum Gravity Phenomenology,’ *arXiv:0806.0339v1[gr-qc]*
- ¹⁰ Ronald J. Adler, Ilya Nemenman, James Overduin, David Santiago, “On the detectability of quantum spacetime foam with gravitational wave interferometers,” *Physics Letters B* **477**, 424-428 (2000).
- ¹¹ Ronald J. Adler, Pisin Chen, and David Santiago, “The Generalized Uncertainty Principle and Black Hole Remnants,” *General Relativity and Gravitation* **33**, 2101 V 2108 (2001).
- ¹² A brief introduction in the form of frequently asked questions is online at: www.astro.caltech.edu/~ejb/faq.html