

NOTES FOR VIDEO "A MATTER OF SOME GRAVITY"

Please click on the right facing arrow several times to begin the 66-min video. The Press Officer of AAS, Rick Fienberg speaks for 7 min, Virginia Trimble for 11 min; Stacy McGaugh for 11, Gerrit Verschuur for 11, David Bartlett for 16; then Q & A for 10.

At the end of her talk, **Virginia Trimble** mentions recent evidence for GR: the demise of the Pioneer Mission Effect, the demise of the Cassini Mission Effect, the possibility of multiverses, the decay of the binary pulsar. We take exception only to the last. It may be true that the orbital period of the compact Hulse-Taylor binary pulsar lengthens at the rate predicted by GR. But the emitted gravitational radiation has yet to be detected on earth. Along the way the mildly tachyonic gravitons could decay to slightly massive photons. [DF Bartlett, Analogies between electricity and gravity, Metrologia 41 (2004) S115-S124.]

Stacy McGaugh defends MOND and TeVeS. His punch line, "the Dark Matter hypothesis is confirmable, but not falsifiable" criticizes the Standard Model of Cosmology.

Gerrit Verschuur shows many celestial near misses between local HI peaks and distant WMAP ones. In the Q & A period he gives key "map-shifting" evidence for his observation that WMAP peaks are associated with, but not identical to, peaks in the Galactic distribution of HI.

David Bartlett emphasizes the flexibility in describing astrophysical phenomena with gravitational and electromagnetic potentials that are both attractive and repulsive. H. Daumier's lithograph of "Monsieur Babinet Alerted by his Housekeeper of the arrival of the Comet" is used by permission of the Daumier Register (info@daumier-register.org).

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