GLOSSARY, Exploring Black Holes

MANY TERMS ARE ALSO DEFINED INSIDE THE BACK COVER

WORDS <u>NOT</u> USED IN THIS BOOK, EXCEPT IN QUOTATIONS, MATHEMATICAL EXPRESSIONS, OR NEWTON'S ANALYSIS. (SEVERAL TERMS ARE MENTIONED ONCE IN ORDER DISMISS THEM.)

absolute, absolutely, actual, actually, amazing, angular momentum (with no modifier), beam (used for global motion of light only), component (never for global quantities; instead use "r-motion" or "phimotion"), correct, distance (with no modifier), endless, energy (with no modifier), established, eternal, eternally, everyone knows that, exact, exactly, fact, in fact, forever, geodesic (instead: worldline of a free particle), Hertz, imaginary, impossible (better: forbidden by the current laws of physics), incredible, incredibly, infinite, infinity, infinitely, Minkowski spacetime (instead, say flat spacetime), never, obvious, obviously, permanent, proof, proper time, radius, radial (OK for the non-spinning black hole), real, reality, rest mass, scalar, Schwarzschild radius, space (with no modifier), tensor, time (with no modifier), trajectory, true, truth, vector, why (asking for purpose or intention).

We are not creating a new dogma here. "Why" and "fact" and "truth" are not forbidden in everyday discussion, for example in analysis of human motivation. But our careful definition of words in this physics textbook helps us to enforce the discipline of predicting observation and measurement and the creation, verification, and application of established theory.

WORDS USED IN THIS BOOK.

Each entry is a pointer to a description or to the full definition in context.

aberration, Section 12.5

advanced civilization, Section 19.4

black hole, Box 4 in Section 6.6

bounce orbit, Section 11.4

bounce point, non-spinning black hole, Section 8.4

circle point, non-spinning black hole, Section 8.4

circlar orbit point for light, Section 11.5

conformal transformation, Section 21.2

constant of motion, Section 1.10

critical impact parameter, Section 11.3

curvature of spacetime, Section 1.10

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