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S-Denying of the Signature Conditions Expands General Relativity's Space DMITRI RABOUNSKI, FLORENTIN SMARANDACHE, Dept. of Math., Univ. of New Mexico, LARISSA BORISSOVA — We apply the S-denying procedure to signature conditions in a four-dimensional pseudo-Riemannian space, i.e. we change one (or even all) of the conditions to be partially true and partially false. We obtain five kinds of expanded space-time for General Relativity. Kind I permits the space-time to be in collapse. Kind II permits the space-time to change its own signature. Kind III has peculiarities, linked to the third signature condition. Kind IV permits regions where the metric fully degenerates: there may be non-quantum teleportation, and a home for virtual photons. Kind V is common for kinds I, II, III, and IV.

Dmitri Rabounski

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