Bare Singularities in General Relativity

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It is generally adopted that singularity of space-time must obligatory be hidden insie of an event horizon (the cosmic censorship principle). At the same time some solutions of the Einstein equation describe manifolds which can well contain hidden singularities. Presence of hidden singularity change drastically physical meaning of such a solution. Signs of this possibility are considered.

Besides, highly flattened source of gravitational field often is being idealized as if its thickness is zero. In this case the space-time is piecewise-smooth and the source appears as a geometric singularity of the space-time. Geometric properties of this singularity are discussed in the case of space-time containing an infinitesimally-thin rotating material disk.