Zero mean curvature surfaces of mixed causal type in the Lorentz-Minkowski 3-space.

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Zero mean curvature (ZMC) surfaces in the Lorentz-Minkowski 3-space are smooth surfaces of mixed causal type with mean curvature, wherever it is well defined, equal to zero.

One of the main tools for the construction of such surfaces is based on the fact that fold singularities of spacelike maximal surfaces have real analytic extensions to timelike minimal surfaces.

Here we give many examples of ZMC surfaces, including families of entire graphs, families of embedded triply periodic surfaces, and so on. A part of this talk is a joint work with Yu Kawakami, Masatoshi Kokubu,

Wayne Rossman, Masaaki Umehara, and Kotaro Yamada..