Conférence
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M-theory solutions, branes, and superalgebras

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A classification of near-horizon brane solutions in M-theory is obtained in terms of classical solutions to 11-dimensional supergravity which are invariant under certain superalgebras. The space-time manifolds of these solutions are products of maximally symmetric spaces of constant positive or negative curvature warped over a Riemann surface. For many cases, exact supergravity solutions are obtained via mappings with classical integrable 2-dimensional field theories generalizing the sine-Gordon model.

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