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## Microlensing in terms of an exact lens map

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In spherically symmetric and static spacetimes, gravitational lensing can be formulated in terms of an exact lens map, in close analogy to the weak-field formalism of lensing. Whereas in the latter case the lens map is a map from a lens plane to a source plane, the exact lens map is a map from the celestial sphere of the observer to a sphere where the light sources are thought to be situated. It is demonstrated that, with the help of the exact lens map, microlensing light curves can be calculated exactly. Several examples are presented, including microlensing by a Barriola-Vilenkin monopole and by a Schwarzschild black hole.

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