

In the present work we study gravitational microlenses consisting of a few point masses. We present the theoretical framework of n -point-mass lensing, and followup by a more detailed description of binary and triple lenses. We demonstrate the analysis of critical curves and caustics of the binary lens and apply the same approach to the case of triple lenses. We divided several two-dimensional cuts of the parameter space into areas with different topology of critical curves. We studied the amplification of a source located in the vicinity of interesting parts of the caustic. We tested the applicability of an approximation for the amplification at the intersection of two folds. Finally, we applied the formalism to the case of the observed triple-lens microlensing event OGLE-2006-BLG-109.