“ANALOGY BETWEEN GRAVITATIONAL AND OPTICAL LENSES”

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In this paper alternatives calculations are proposed intended to simplify the getting of equations given by gravitational lenses characteristics. To do it, an analogy has been done between proposed calculations by classic mechanics and the theory of general relativity with those of optical lenses. This analogy begins from those systems where the deflector, observer and the source are aligned; and when there is not a perfect alignment between these. From this situation the necessary conditions are deduced for multiple images formation according to the masses distribution in the gravitational lens.