

Model of nucleus-nucleus interaction on the basis of production of quark-gluon matter blobs with a large orbital momentum

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In many cases, interactions of nuclei are considered as collisions of A_1 and A_2 nucleons if it is possible to neglect the binding energy of the nucleus. However for very high kinetic energy of colliding nuclei there is a possibility of collective interaction of nucleons with production of quark-gluon matter blobs. As it was shown earlier, in this case a large orbital momentum appears. In that paper, calculations were made for equal nuclei. Here we generalize this approach and calculate orbital momentum for various ratios of radii of interacting nuclei.

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