

Calculation of Optical Properties of Very Fluffy Dust Particles

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Cosmic dust have various irregularly shapes because of the difference in the formation process. Among the dust shape model used in the simulation, the fluffy dust particles known as BCCA (Ballistic Cluster-Cluster Aggregate) is our target shape to study the optical properties (e.g. scattering and absorption). In the presentation, we will show the method to calculate the optical properties of BCCA particle, whose monomer number is larger than 1024 and monomer size parameter is larger than 2 based on the structure of aggregate and by using Superposition T-matrix method developed by Dr. Macowski at Auburn University.