
Search for fractal structures in monte-carlo $AuAu$ events at energy 200 GeV by $SePaC$ method

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Fractals, random and AMPT $AuAu$ events are analyzed by the SePaC method. The transverse momenta p_t of negative charged particles in five centrality classes are studied. It is shown that fractal $AuAu$ events with independent partition have several narrow peaks in the spectrum of fractal dimensions D_F , a selected group of leading particles by p_t for all events and satisfy the criteria describing statistical properties. The remaining events exhibit exponential behavior of the p_t spectrum. Fractal $AuAu$ events with dependent partition have a broad peak in the D_F spectrum and are suppressed by the criteria.

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