

Electrorheological dusty plasma
(experiments on structural phase transitions on the board of ISS)

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Results of the experiments for studying the phase transition from an isotropic to an anisotropic ("string") plasma state. It has been revealed that such a transition is possible when an external electric field is applied. This leads to a distortion of the Debye spheres that surround dust particles. The experiments were performed under microgravity conditions with different sizes of microparticles and plasma parameters.