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Simulation of aerosol distribution in hyperbolic resonator

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## Highlights

• At first resonant frequency in hyperbolic resonator the Schlichting and Rayleigh vortices are formed.

• Maximum acoustic streaming velocity is reached between Schlichting and Rayleigh vortices.

• Five zones of increased concentration of aerosol particles (acoustic traps) arise in hyperbolic resonator.

• The concentration of aerosol particles in traps is affected by the entrainment coefficient.

• For the case of maximal eigen drift of particles the borders of all traps are the clearest.

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