



## **Cavity resonances in the inner magnetosphere**

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In the inner magnetosphere region there are sharp plasma boundaries that can cause resonance cavities. The four Cluster satellites move in a string-of-pearls configuration at perigee (near  $L = 4 - 5$ ) so that they are spatially well separated but their separation is still short that at least some of them are simultaneously at different positions inside the cavity. In the presence of cavity resonance of a half wavelength, all spacecraft inside the cavity observe the same wave mode in the same phase. In this talk we analyze and present a number of cavity resonances observed by the Cluster spacecraft. Typical observed mode frequencies are between 4 - 14 mHz, depending on the size of the cavity.