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## Sub-second vibrations from a vertical corona in a black-hole transient.

The geometry of the accretion flow around accreting black holes is highly variable and remains highly unconstrained. In their hard states, the X-ray spectrum is dominated by a hot inflow located above or within the accretion disk. Conversely, in their soft states, the spectrum is dominated by soft emission from the geometrically thin accretion disk. The geometry of the hot inflow and its evolution across the hard-to-soft transition are still debated. Correlated fast multilambda variability can be a powerful tool for studying the physics of accretion and ejection in X-ray binaries, providing quantitative constraints that X-ray data alone cannot offer. Here, we report the detection of a characteristic variability feature observed during the hard-to-soft transition of the accreting black hole GX 339-4, simultaneously at X-ray and infrared wavelengths. Supported by an extensive multi-wavelength campaign, these data allow us to constrain the geometry of the emitting region, suggesting the presence of a vertical structure.

### Contribution

Oral talk

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