

The IHC South Asian Religions and Cultures Research Focus Group Presents

*Sonic Spatiality in Sacred Spaces:
An Analysis of Resonance in South Indian Temples*

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Wednesday, May 28 / 5:00 pm / 3041 Humanities and Social Sciences Building

Sound has long played a central role in Hindu worship, with Vedic chants, bells, conch-shells, and gongs shaping the spiritual soundscape. Unlike the time-domain focus typical in Western religious acoustics, Hindu rituals emphasize frequency-rich sounds, forming what we term a “frequency domain soundscape of worship.” In this talk Shashank Aswathanarayana will present the results of his acoustic analysis of six UNESCO heritage South Indian temples: four rock-cut cave temples in Badami and Aihole and two freestanding temples, the Virupaksha temple in Pattadakal and Vijaya Vittala temple in Hampi. Using impulse response measurements, standard acoustic parameters such as reverberation time (T30) and clarity index (C80) and nonstandard parameters such as resonance quality and resonance width are computed to provide an insight into their acoustic properties. His findings highlight how temple architecture supports ritual acoustics, with implications for both heritage preservation and the virtual re-creation of ancient sonic environments.

Shashank Aswathanarayana is a music technologist, percussionist, and researcher from Bengaluru, India, who is currently a Postdoctoral Fellow in Audio Technology at American University. He received his PhD in Media Arts and Technology from the University of California, Santa Barbara.



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