

**Society for the History of Technology (SHOT)
Annual Meeting – New Orleans (Louisiana)
18-21 November 2021**

Open Session Proposal

Wireless Infrastructures: Electrical Engineering and the Cultural Artifact of Ether

Organizer: Yijun Sun (University of Massachusetts, Amherst—yijunsun@umass.edu)

This panel explores the infrastructures of wireless communication, with a focus on the complex interplay between electrical engineering and the social imaginaries of ether. It contributes to research on media technology and the general “material turn”. In conversation with Kittler’s famous definition of the three functions of media: storage, transmission, and processing, this panel invites a conversation on how an investigation of wireless infrastructures can contribute to our knowledge of media from the very operational level. We are also interested in the cultural conceptions that co-produced the history of wireless communication and our digital reality. Ether, believed to be an invisible mediating substance that bathes all objects, had its resurrection in the 19th century electrical studies from the action concept. It worked as a useful cultural atmospheric representation mediating powers in many of the early electromagnetic and electronic theorizations. These technical artifacts, real or imaginary, were closely connected to the social understanding of mediation, matter and electrical action. They are ambient in our understandings of communication today and our projections of the future.

We welcome papers that touch upon these topics from all disciplines. Papers with historical and theoretical methods are particularly welcomed. Topics include but are not limited to histories of electrical engineering, histories of telecommunication, art practices and science histories of ether, computer history and digital culture, theoretical studies of media and mediation, discussions in 5G, Bluetooth, satellite, radiant energy, and all other wireless technologies and phenomena.

Procedure: Those interested in proposing papers for this session should provide a one-page abstract (max 500 words) and a short bio. Please send them to Yijun Sun (yijunsun@umass.edu) by April 7, 2021.