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Victoria Manfredi is an Assistant Professor in the Department of Mathematics and Computer Science at Wesleyan University. Her work focuses on characterizing wireless, mobile, or otherwise dynamic networks, and using the derived insights to design more robust and private communication protocols. She received her PhD and MS in Computer Science from the University of Massachusetts Amherst, and her BA in Computer Science and Neuroscience from Smith College. Prior to Wesleyan University she was a scientist at Raytheon BBN Technologies, and was a Computing Innovation Fellow at Boston University.

IEEE Albuquerque WIE Affinity Group
Chair: Aisha B Rahman
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Designing Robust and Adaptive Routing Strategies for Networks

VICTORIA
MANFREDI (PH.D.)

**Assistant Professor,
Dept. of Mathematics & Computer Science, Wesleyan University**

Thur, Sep. 21
5:00PM (MT)

ZOOM VIRTUAL
MEETING
Free and Open to the Public
Pre-registration required

Meeting ID: 986 6624 6778

Abstract:

Telecommunication networks are increasingly prevalent in our lives, from the Internet to the Internet of things to satellite networks to wireless networks and more. Ensuring that devices (such as a computer, robot, or sensor) are able to communicate with each other using these networks requires performing a balancing act of traffic and network resources, and solving a distributed search problem to identify a good path through the network from one device to another. The challenge is to find such paths while contending with time-varying traffic, potential changes in the network topology, and security and privacy risks. In this talk, I will overview how to design routing strategies that are able to meet this challenge and improve communication in a variety of computer networks, including mobile ad hoc networks, quantum key distribution networks, and the Internet.

Albuquerque IEEE WIE Public Talk
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