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Hello!

I am Suvodip Mukherjee. You will find me at office-226 (email: smukherje@uconn.edu)



I WORK ON MULTI-MESSENGER COSMOLOGY

**Electromagnetic Waves (EM) and
Gravitational Waves (GW)**

Observational probes:

**EM: Large Scale Structure (LSS),
Cosmic Microwave Background (CMB)**

**GW: Binary Black Holes, Binary
Neutron Stars, and Neutron Star Black
Holes**

**WHAT IS THE EXPANSION RATE OF
THE UNIVERSE AND HOW IT
EVOLVES WITH COSMIC TIME ?**

**WHAT IS DARK MATTER (AXION,
PRIMORDIAL BLACK HOLES)?**

**HOW AND WHERE THE BINARY
BLACK HOLES ARE FORMED IN
THE UNIVERSE ?**

**IS GENERAL THEORY OF
RELATIVITY THE CORRECT THEORY
OF GRAVITY ?**

**WHEN AND HOW COSMIC
REIONIZATION HAPPENED?**



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**Member of GW experiments: LIGO Collaboration
LISA Consortium (Cosmology-Lead, Multi-Messenger Multi-Band Astronomy)
Member of CMB experiment: CMB-S4
Member of LSS experiment: Rubin Observatory (LSST)**

DATA-DRIVEN UNDERSTANDING OF PHYSICAL COSMOLOGY AND FUNDAMENTAL PHYSICS

