

KINGDOM OF SAUDI ARABIA

Ministry of Education

TAIBAH UNIVERSITY

college of Science

(039)

رؤية  
VISION 2030



المملكة العربية السعودية  
وزارة التعليم  
جامعة طيبة  
كلية العلوم  
(039)

## Seminar

**Title:**

**The universe through atoms**

يوم الأحد الموافق 20/12/2021  
بداية من الساعة 10 صباحاً

المحاضر: أ.د. سلطانة نهار



**Abstract:** Our universe is made of galaxies of stars and there are trillions of galaxies. Yet they are so far away from each other that space is largely empty. Even our nearest star beyond the Sun is so far away that We will not be able to travel the distance within our lifetime using the current technology. So how do we learn about the stars or any other astronomical object? It is through the study of the light or electromagnetic radiation that is emitted by the atoms and molecules in them. We capture the photons of the radiation by telescopes and find out the wealth of information carried in them. I will discuss the science of atomic processes that emit or absorb photons and the spectroscopy that gives us information.