

DEPARTMENT OF PHYSICS

Seminar series

You are cordially invited
to the following Ph.D. seminar

**Standardized precipitation index
(SPI) variations and identification of
droughts for the Caribbean islands
of Trinidad and Tobago**

presented by

Ms. Sharlene Beharry

Date: 27th April, 2016

Time: 1:00 pm

Location: FST Rm. 113

Supervisor(s): Dr. Ricardo Clarke & Prof. Donald
Gabriel

ABSTRACT

Standardized precipitation index (SPI) is based solely on precipitation which can be used to classify periods of dryness and wetness, at different temporal scales, 1-month, 3-months, 6-months, 12-months and 24-months (WMO 2012). This seminar aims to present the findings of the SPI patterns for 18 monthly rainfall datasets, 16 in Trinidad and 2 in Tobago, of varying time periods, ranging from 1862 – 2014. In the study rainfall datasets from three dam sites; Navet and Hollis in Trinidad, and Hillsborough in Tobago were in the 18 datasets. The rainfall datasets were statistically analyzed using the SPI under the following temporal resolutions, climatic periods (30 years), decadal (10 years), yearly and seasonally. It was found that there were more variations during the 1-month, and 3-months SPI compared with the 6-months and 12-months SPI. The implications of the SPI patterns with respect to the water resources will be discussed.