



Western University
Department of Physics and Astronomy

PHYSICS & ASTRONOMY COLLOQUIUM

Date: **Thursday, 31 October 2019**
Time: **1:30 p.m.**
Location: **Physics & Astronomy Seminar Room 100**

Dr. Francesca Vidotto

Departments of Applied Mathematics and Philosophy
Western University

“White holes: The bright side of black holes”

ABSTRACT

We live in a tremendous moment for black-hole physics: this year the first picture of a black-hole shadow was taken, and we are detecting more and more gravitational waves coming from the merging of binary black holes. But when we extract the black-hole solution from Einstein's equations, we also find the time-reversed solution: a white hole. White holes have been deemed as non-physical and ignored for long time, yet acknowledging the possibility of their existence may help to solve some long-standing problems in the physics of black holes. In this colloquium we will discuss what white holes are, how black holes can create them, and how this could have implications for understanding dark matter.



HOST: G. Fanchini

COFFEE + light snacks will be available in the Atrium, 2nd floor, at 1:15 p.m.