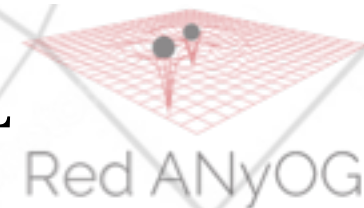


**THE MEXICAN DIVISION OF GRAVITATION AND MATHEMATICAL  
PHYSICS AND THE  
THEMATIC NETWORK OF BLACK HOLES AND GRAVITATIONAL  
WAVES**



**CERTIFIES THAT  
CUPATITIZIO RAMÍREZ**

Participated with the talk “*FRW quantum cosmology with a scalar field with a shift invariant potential*”, in the *XII Mexican School of the Division of Gravitation and Mathematical Physics* and the *III School of General Relativity and Gravitational Waves*, that took place on 5-9 of November 2018 in Playa del Carmen, México.

**Dr. Oscar Miguel Sabido Moreno**

President

Division of Gravitation and Mathematical Physics

**Dr. Claudia Moreno González**

Responsable

Thematic Network of Black Holes and Gravitational Waves

