



# Yuichiro TADA (多田 祐一郎)

tada.yuichiro@e mbox.nagoya-u.ac.jp

2017 Mar. Ph.D. (Science)

2017 Apr. PD researcher

2018 Apr. JSPS fellow (PD)

2021 Apr. Designated Asst. Prof. (YLC)

The University of Tokyo

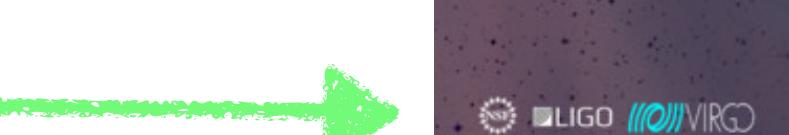
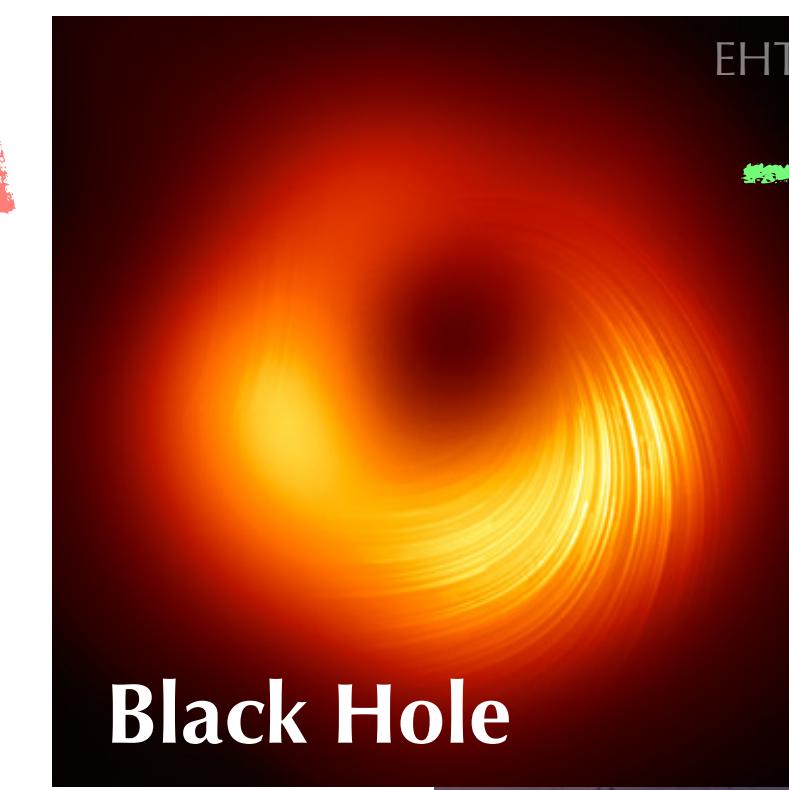
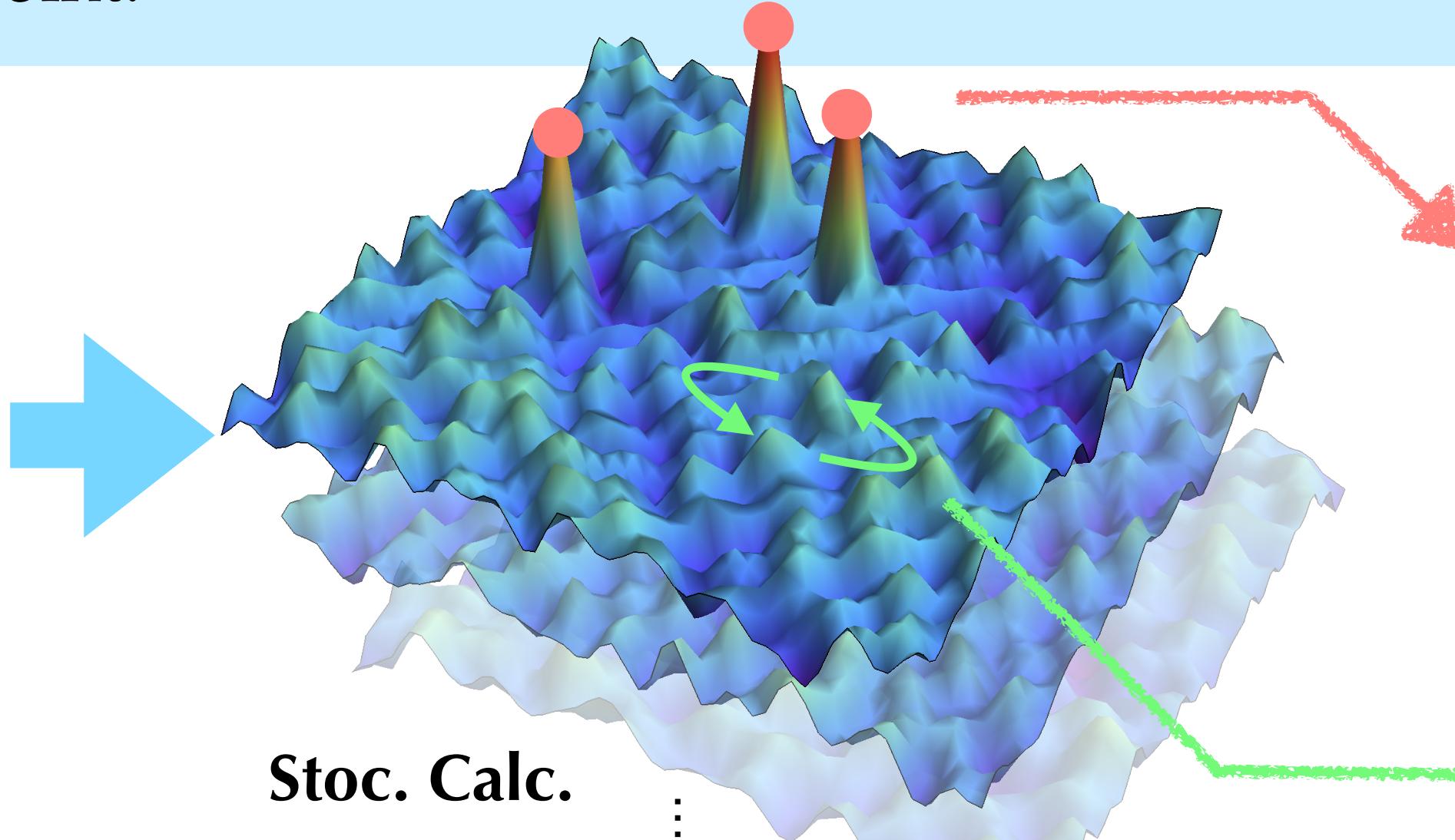
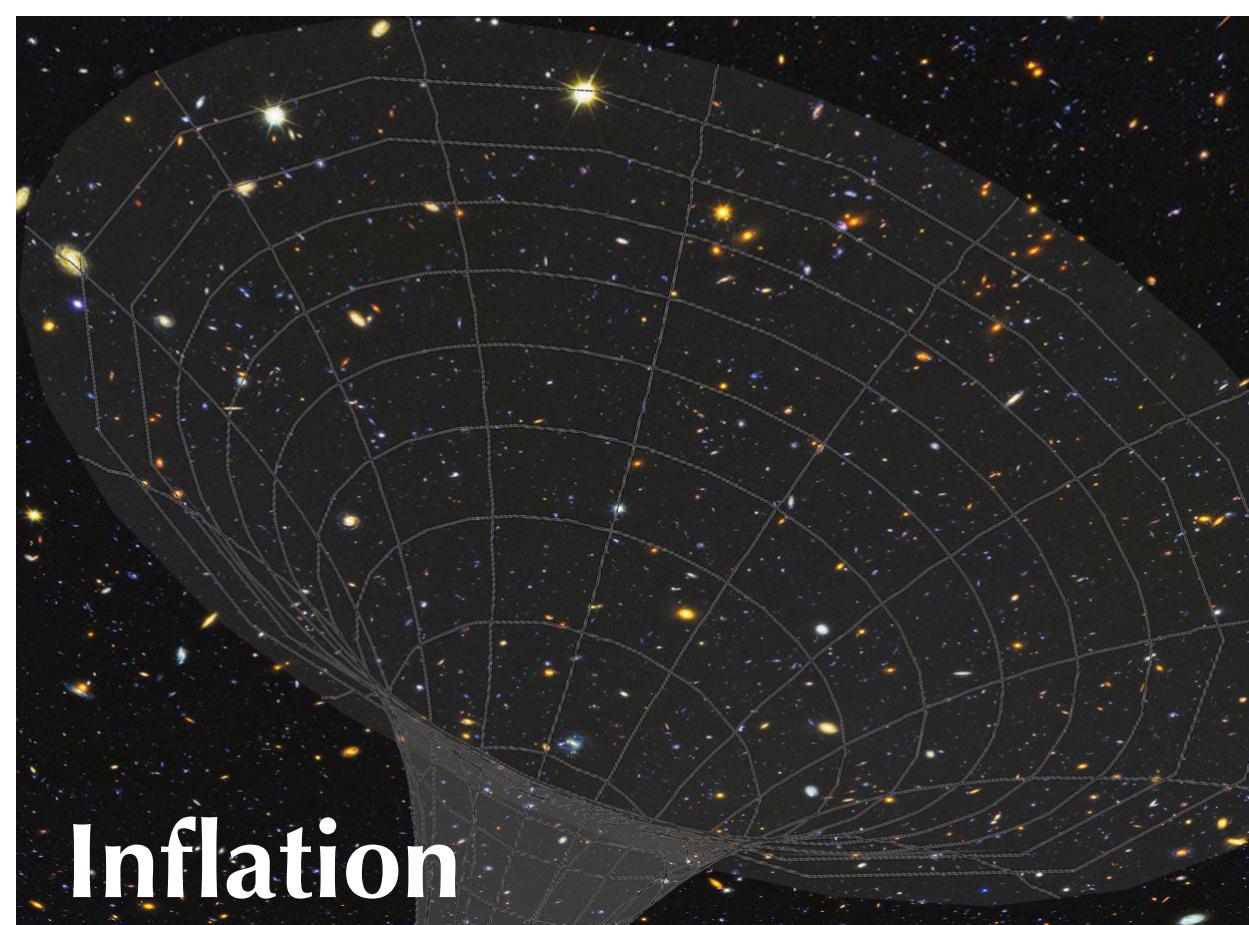
Institute d'Astrophysique de Paris

Nagoya University (C-lab.)

Nagoya University (C-lab.)

## Research Topic: Approach to Cosmic Inflation in light of Stochastic Calc., Prim. Black Hole, and Grav. Wave

Our universe is thought to start with an accelerated expansion phase called **Inflation**. It can source various cosmic structures (e.g., galaxy) from quantum fluctuation, but its expansion mechanism has not been explained. As a possible sourced object, **Primordial Black Hole** (原始ブラックホール) has attracted attention as a candidate of **Dark Matter** (暗黒物質). **Gravitational Wave** (重力波) is also attractive because it can be directly detected now. I have proposed a powerful algorithm to evaluate their production by applying **Stochastic Calculus** (確率解析), and am approaching to the inflation mechanism from these viewpoint.



Grav. Wave

Deborah Ferguson | Karan Jani | Deirdre Shoemaker | Pablo Laguna