TFC Fusion Research Seminar #10

1． Date：May 29, 2018, 16:00-17:00 at TOKYO ELECTRON House of Creativity

2． Speaker：Olivier Pironneau (Sorbonne University and Academy of Science)

3． Lecture title：Stochastic control by PDE. Methods

4． Abstract：

Stochastic optimal control problems are very common in finance -- portfolio optimization for instance -- and risk analysis. Risk is usually a criteria which involves the world's state; for instance what is the best policy to extract oil when the price of oil depends on how much oil all extractors produce? Consequently a solution by a Ricatti equation may not be available and the alternative involves a backward stochastic differential equation. We shall analyse several algorithms, mostly using the Kolmogorov equation and give a few examples to illustrate their behaviour.

5． Lecture language：English