

# THE HONG KONG POLYTECHNIC UNIVERSITY

## DEPARTMENT OF APPLIED MATHEMATICS

### Post Specification

- (1) **Research Fellow** (Ref. 19022507)  
[Appointment period: one month]
- (2) **Research Associate (two posts)** (Ref. 19022508)  
[Appointment period: each for one month]
- (3) **Research Assistant (two posts)** (Ref. 19022509)  
[Appointment period: each for one month]

### Duties

The appointees will assist the project leader in the research project - “Dynamic optimization of large-scale system with admissibility constraint: The homogenous and heterogeneous case”.

### Qualifications

Applicants for the **Research Fellow** post should have:

- (a) a doctoral degree with at least three years of postdoctoral research experience or equivalent qualifications and experience; and
- (b) highly related research experience and strong background/research records in the following areas:
  - (i) stochastic differential game and optimization theory;
  - (ii) applied probability;
  - (iii) stochastic calculus; and
  - (iv) SDE theory.

Preference will be given to those who have already published various high-level papers in international referred journals.

Applicants for the **Research Associate** post should have:

- (a) a master’s degree or a good honours degree with at least three years of research/relevant work experience; and
- (b) related research experience and strong background/research records in the following areas:
  - (i) stochastic differential game and optimization theory, in particular, the control and optimization of Forward-backward system (FBSDE);
  - (ii) the related differential game; and
  - (iii) SDE theory.

Preference will be given to those who have already published qualified papers in international referred journals.

Applicants for the **Research Assistant** post should have:

- (a) an honours degree or an equivalent qualification;
- (b) related stochastic calculus training; and
- (c) strong educational background and research records in the following areas:
  - (i) stochastic differential game and optimization theory, in particular, the control and optimization of Forward-backward system (FBSDE);
  - (ii) the related differential game; and
  - (iii) SDE theory.

Applicants are invited to contact Dr James Huang at tel no. 2766 6961 or email [majhuang@polyu.edu.hk](mailto:majhuang@polyu.edu.hk) for further information.

### **Remuneration**

A highly competitive remuneration package will be offered. Applicants should state their current and expected salary in the application.

25 February 2019