

Enrico Scalas

JSPS short-term invitational fellowship S18099

The fellowship concerned theoretical modelling and empirical validation of models for the distribution of wealth and income. I was warmly hosted by Prof. Taisei Kaizoji at the International Christian University (ICU) in Tokyo.

During my 60 days at the International Christian University, I worked with Mr Zheng Nan and with Professors Taisei Kaizoji and Lukas Pichl on the empirical validation problem. We decided to implement the so-called Approximate Bayesian Computation (ABC) methodology. We are now working towards a new paper on the approximate Bayesian estimate of income and wealth distributions.

During the period at ICU, we met Prof. Cheoljun Eom from Pusan National University. This meeting took place from November 2 to November 4, 2018. The outcome of this meeting was the submission of the paper entitled "*Fat Tails in Financial Return Distributions Revisited*" to Physica A. This is a paper co-authored by Prof. Eom, Prof. Kaizoji and myself.

We also organised two seminars at ICU, on 19 November 2018 and on 30 November 2018:

19 November 2018: Special seminar with the following speakers

Prof. Enrico Scalas (University of Sussex)

Prof. Yoshi Fujiwara (University of Hyogo, Kobe)

Mr. Rubaiyat Islam (University of Hyogo, Kobe)

Mr. Shinya Kawata (University of Hyogo, Kobe)

30 November 2018: Special seminar with the following speaker

Prof. Yuji Aruka (Chuo University, Tokyo)

I was invited by Prof. Akio Matsumoto to present a seminar at Chuo University on 28 November 2018. The seminar concerned "*A stylized model for the distribution of wealth.*"

As a follow-up of the Special Seminar held on 19 November 2018, I presented a draft proposal to Prof. Fujiwara for potential activities related to the Post K computer on the distribution of wealth and income.

As mentioned in the meeting in London earlier this year, this invitational fellowship gave me the opportunity of visiting the grave of my co-worker and friend Jun-ichi Inoue who prematurely died in 2015. The grave is in Isehara-City near Tokyo at Sanpukuji-temple. I visited the temple together with Prof. Aruka and Prof. Kaizoji. I wish to thank prof. Aruka for making this visit possible.

In summary, in my opinion, this was a successful short-term visit to Japan which paved the way for several future collaborations.



From left to right, Prof. Aruka, Prof. Scalas and Prof. Kaizoji visiting the grave of Prof. Jun-ichi Inoue at Sanpukuji.







Tea ceremony in the garden of the Tokyo National Museum.