## PhD position at Vrije Universiteit Amsterdam

Applications are invited for a PhD position (four years) on the topic of

## Networks: optimization and game theory

The opening is within the Department of Econometrics & Operations Research of the Vrije Universiteit Amsterdam. Our group consists of a number of researchers working on theoretical problems in combinatorial optimization and algorithms, motivated by real-world applications (http://www.feweb.vu.nl/en/research/research-programmes/07-or-and-it/index.aspx). The successful applicant will also have the opportunity to spend time at CWI and to participate in the activities of the Networks & Optimization group, with which we have strong ties. CWI is the national research institute for mathematics and computer science in the Netherlands; see http://www.cwi.nl/research-groups/Networks-and-Optimization.

The research will be pursued under the supervision of Dr. Neil Olver, and will be in the area of combinatorial optimization and algorithmic game theory. Possible topics include:
Understanding the effects of strategic user behaviour in dynamic (time-varying) models of traffic networks. There are very large gaps in our theoretical understanding of these models.
Algorithms for network design problems, motivated by issues in communication and transportation networks. This is a rich area both in terms of theory and applications.

More information can be found at: http://nolver.net/home. Further questions can be addressed to Dr. Neil Olver at n.olver@vu.nl.

The position is funded by a TOP grant of the NWO (the Dutch Organization for Scientific Research). It includes substantial travel funding, and the applicant will be encouraged to attend conferences and to collaborate internationally. Amsterdam is a beautiful, lively, and exceptionally liveable city. The gross monthly salary, for an employee on a full time basis, is 2146 Euro during the first year and increases to 2744 Euro over the four year period. In addition to this, there is a holiday allowance of 8% of the gross annual salary and a year-end bonus of 8.33%. Expats are typically eligible for a substantial tax benefit (the "30% ruling").

Requirements and application:

Applicants should have (or expect to soon have) a masters degree in mathematics, operations research, or computer science, on a topic related to algorithms, optimization or game theory. Proficiency in English is a requirement; Dutch language skills are not needed.

Please send your application before March 24, 2016 to: n.olver@vu.nl. Please indicate "PhD application" in the subject line.

Applications received after this date will still receive full consideration if the position is not yet filled.

Applications should include

- a detailed CV,
- a motivation letter,
- a list of your M.SC. courses and grades,
- a copy of your master thesis (if available),
- a list of publications (if applicable), and
- contact details of at least two references.