Workshop on Strategic Aspects of Terrorism, Security, and Espionage

Stony Brook University, Stony Brook, NY, July 16-18, 2014

Organizers: Drs. Boaz Ganor, Timothy Mathews, and Yair Tauman

Wednesday, July 16, 2014:

9:00am-9:50am: Registration and coffee/refreshments

<u>9:50am-10:00am</u>: Opening Remarks (Yair Tauman and/or Timothy Mathews)

10:00am-11:15am: Session I – "Coalition Formation and Bargaining" (3 presentations, 25 minutes each)

- (i.a) *Transnational Terrorism: Externalities and Coalition Formation* (Andre Rossi de Oliveira, Emilison C.D. Silva, & Joao Ricardo Faria)
- (i.b) Stag Hunt Contests and the Alliance Formation Puzzle (James Boudreau & Shane Sanders)
- (i.c) An Economic Theory of Bargaining and Fighting with Endogenous Destruction (Yang-Ming Chang & Zijun Luo)

<u>11:15am-12:00pm</u>: Computational Game Theory for Security: Key Algorithmic Principles, Deployed Applications and Research Challenges (Milind Tambe)

12:00pm-1:30pm: lunch break

<u>1:30pm-2:20pm</u>: Session II – "Foreign Policy and Aid" (2 presentations, 25 minutes each)

- (ii.a) *Aid as a Foreign Policy Instrument to Tackle Terror* (<u>Prabal Roy Chowdhury</u> & Jaideep Roy)
- (ii.b) Can Delegated Deterrence Succeed?: A Game Theoretic Analysis of Cooperation in Counterterror (Catherine Langlois)

<u>2:20pm-3:10pm</u>: Session III – "Experimental Studies" (2 presentations, 25 minutes each)

- (iii.a) An Experimental Study of Dark Network Formation and Disruption (Mark Bloxsom, Ronald Breiger, <u>Michael McBride</u>, & Brint Milward)
- (iii.b) An Experiment on Deception, Credibility, and Trust (David Ettinger)

3:10pm-3:40pm: coffee break

Thursday, July 17, 2014:

<u>9:00am-9:30am</u>: *Counterterrorism Dilemmas and Challenges* (Boaz Ganor)

9:30am-10:45am: Session IV – "Contest Models" (3 presentations, 25 minutes each)

- (iv.a) Generalizations on the Colonel Blotto Game: What's Possible with Existing Solutions? (Brian Roberson & Dan Kovenock)
- (iv.b) Do Humanitarian Interventions Help Humanity? A Contest-Theoretic Analysis of Morally Hazardous Rebels in Civil Conflict (Shane Sanders & Vincent Auger)
- (iv.c) Focality and Asymmetry in Multi-battle Contests (Subhasish M. Chowdhury, <u>Dan Kovenock</u>, David Rojo Arjona, & Nathaniel T. Wilcox)

10:45am-11:15am: coffee break

11:15am-12:30pm: Session V – "Espionage and Intelligence" (3 presentations, 25 minutes each)

- (v.a) The Decision to Attack a Nuclear Facility: The Role of Intelligence (Yair Tauman)
- (v.b) Economic Espionage (Konrad Grabiszewski & Dylan Minor)
- (v.c) Entry with Two Correlated Signals (Alex Barrachina, Yair Tauman, & Amparo Urbano)

12:30pm-2:00pm: lunch break

<u>2:00pm-2:45pm</u>: *Econometric Studies of the Impact of Terrorism* (Rafi Melnick)

<u>2:45pm-4:00pm</u>: Session VI – "Empirical Studies" (3 presentations, 25 minutes each)

- (vi.a) Lone Wolf Terrorism and Economic Analysis (Peter Phillips)
- (vi.b) Youth Unemployment and Terrorism in the MENAP Region (Aniruddha Bagchi & Jomon Paul)
- (vi.c) Networks in Conflict: Theory and Evidence from the Great War of Africa (Michael Koenig, Dominic Rohner, Mathias Thoenig, & Fabrizio Zilibotti)

4:00pm-4:30pm: coffee break

6:00pm: Reception Dinner

Friday, July 18, 2014:

9:30am-10:20am: Session VII – "Special Topics 1" (2 presentations, 25 minutes each)

- (vii.a) *The Social Evolution of Terror and Genocide Across Time and Geographic Space: Perspectives from Evolutionary Game Theory* (Charles Anderton)
- (vii.b) *Game-Theoretic Approach to Feedback-Driven Multi-Stage Moving Target Defense* (Quanyan Zhu & Tamer Basar)

10:20am-10:50am: coffee break

<u>10:50am-11:40am</u>: Session VIII – "Special Topics 2" (2 presentations, 25 minutes each)

(viii.a) Counterterrorism Analysis Using Cooperative Game Theory (Sung Chan Choi)

(viii.b) Modeling Hostage-Taking: On Reputation and Strategic Rationality of Terrorists (Heinrich Nax)