



University of Haifa  
אוניברסיטת חיפה



Minerva Stiftung Gesellschaft  
für die Forschung m.b.H



Technion  
טכניון

## Max-Wertheimer Minerva Center for Cognitive Processes and Human Performance

אנו שמחים לארח את:

**Dr. Eldad Yechiam**

**Behavioral Sciences Area,  
Faculty of Industrial Engineering and Management,  
Technion**

### *Using cognitive models to map relations between neuropsychological disorders and human decision making deficits*

Findings from a complex decision making task (the Iowa gambling task) show that individuals with neuropsychological disorders are characterized by decision making deficits, leading to maladaptive risk-taking behavior. I will present a cognitive model which distills the performance in this task into three different underlying psychological components: the first measures the relative impact of rewards and punishments on evaluations; the second estimates the rate that the contingent payoffs are learned; and the third determines the consistency between learning and responding. Findings from twelve studies are organized by distilling the observed decision deficits into the three basic components, and locating the individual in this component space. The results improve the sensitivity of the task to individual differences between (a) patients with different lesions, (b) abusers of different drugs, and (c) prisoners incarcerated for different crimes. In addition, the parameters are differentially affected by distinct psychoactive chemicals.

ההרצאה תתקיים ביום ב' ה-12 לדצמבר 2005 בשעה 12:00  
בחדר סמינרים במעמק"ה, בניין רב-תכליתי, אוניברסיטת חיפה.

נשמח לראותכם בין אורחנו.

המעוניינים באישור כניסה לאוניברסיטה יתקשרו לאתי 04-8249430