UNIVERSIDAD DE GRANADA

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y del Comportamiento

Talk Dr. Jan Theeuwes: "Top-down, bottom-up and selection history-driven selection"

Desde el Mié, 29/01/2025 - 15:00
hasta el Mié, 29/01/2025 - 16:30

Top-down, bottom-up and selection history-driven selection

Dr. Jan Theeuwes Vrije Universiteit, Amsterdam,
The Netherlands
Date and time: Jan 29, 15:00h.
Venue: Sala de Conferencias 1, CIMCYC

Abstract: The current presentation introduces an integrated tripartite framework for understanding attentional control, highlighting the interaction and competition among top-down, bottom-up, and selection-history influences. We will explore recent behavioral, EEG, and fMRI studies that focus on how selection history shapes attentional control. Our findings suggest that selection history continuously adapts the weights within a so-called "spatial priority map," which dynamically governs the deployment of covert and overt attention at any given moment. Locations that previously contained relevant information are up-regulated, while locations with a higher probability of containing distracting information are down-regulated. In this framework, selection follows the priority landscape formed by combining various

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signals, such as current goals and bottom-up saliency, with priority weights influenced by previous selection episodes.