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Seminario de Probabilidades de Chile

Orador: Fernando Cordero - Boku University

Título: Speciation induced by dormancy in a model with changing environment.

Resumen:

We consider a population model in which the season alternates between winter and summer. Individuals can acquire mutations that are advantageous in the summer but disadvantageous in the winter, or vice versa. Furthermore, it is assumed that individuals within the population can either be active or dormant, and that individuals can transition between these two states. Dormant individuals do not reproduce and are not subject to selective pressures. Our findings indicate that, under some conditions, two waves of adaptation emerge over time. Some individuals repeatedly acquire mutations that are beneficial in the summer, while others repeatedly acquire mutations that are beneficial in the winter. Individuals can survive the season during which they are less fit by entering a dormant state. This result demonstrates that, for populations in fluctuating environments, dormancy has the potential to induce speciation.

This is joint work with Adrián González Casanova and Jason Schweinsberg

El enlace para conectarse al seminario es:

Unirse a la reunión Zoom https://reuna.zoom.us/j/84521834914?pwd=OTZ6Y0NWM3pYTGtTbEt3c0luTG96UT09

ID de reunión: 845 2183 4914 Código de acceso: 997973

Modalidad híbrida en la sala Maryam Mirzakhani, Torre Norte Piso 6, , Beauchef 851. Miércoles 07 de Mayol 2025 a las 16:15 horas.

