



CICLO

CONFERÊNCIAS 18|19

ISPA - INSTITUTO UNIVERSITÁRIO

D-TRACK – A NEW SOFTWARE TO ANALYSE MOVEMENTS AND ROUTINES OF CAPTIVE BOTTLENOSE DOLPHINS



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Scoring and tracking animal movements manually is a time consuming and subjective process, susceptible to errors due to fatigue. Automated and semi-automated video-based tracking methods have been developed to overcome the errors and biases of manual analyses and used in a variety of experiments with different animal models. However, these techniques were unsuitable to study the movements of large animals such as captive bottlenose dolphins in their sizable pools. The D-Track, an open-source semi-automatic tracking system, was developed to quantify the 3D trajectories of dolphins in captive environments, non-invasively, in the water. This software produces a three-dimensional reconstruction of the pool and tracks the animal at different depths, using standard cameras. D-Track allows, not only the determination of spatial preferences of the animals, but also their speed and the identification of behavioral routines. This system is a novel tool to study the behavior of aquatic animals, and it represents a convenient and inexpensive solution for laboratories and marine parks to monitor the preferences and routines of their animals.

22 OUTUBRO 2018

12H30 | AUDITÓRIO 1

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