

Summary

Innate and acquired navigational abilities of animals are often used for purposes of study of neural mechanisms and modeling of cognitive functions. Detailed analysis of behavior allows deeper understanding of some brain structures, such as the hippocampus, entorhinal and posterior parietal cortices, and their role in these phenomena. Most of behavioral tasks involved stable environment, although the world surrounding us dynamically changes every minute. The thesis aimed at extending the knowledge of behavior of laboratory animals in mobile environments and the involvement of brain structures in processing of dynamic information.