

Substellar objects (giants planets and brown dwarfs) are objects not massive enough to sustain hydrogen fusion as stars do. These two groups have many similar properties; hence, the best way to characterise and distinguish them is intensively discussed. One can argue that the current definition based on the mass is not fundamental as it does not include objects in the phase of accreting mass, which can end up either as giant planets or brown dwarfs. Hence, the formation process can be a better approach to distinguishing giant planets from brown dwarfs. However, because of the difficulty in observationally determining the formation history of individual substellar companions to stars, such a definition is very difficult to put into practice. The presented study discusses transiting substellar objects as especially suitable objects to study their formation and evolution history. It presents techniques which can be used to study the formation and evolution of these objects, focusing primarily on the tidal interactions between substellar objects and host stars, and discusses that the precision of stellar parameters such as mass, radius and age play a crucial role. Tidal interactions are then studied for two specific systems of a transiting brown dwarf and Saturn-mass planet. Finally, to understand the formation and evolution of these systems, one must also understand the effect of other bodies. Planetary systems can be significantly affected by wide companions through different processes. The work compares the parameter distributions of known planets around single stars to that with a wide stellar and substellar companion to search for possible peculiarities in their parameter distributions. So far, planets in systems with a wide brown dwarf companion appear to follow their own eccentricity distribution with a maximum at ~ 0.65 and usually have periods larger than 40 days and masses larger than 0.1 mass of Jupiter.