

## **RESOLUTION 5**

## Definition of a Planet in the Solar System

Contemporary observations are changing our understanding of planetary systems, and it is important that our nomenclature for objects reflect our current understanding. This applies, in particular, to the designation "planets". The word "planet" originally described "wanderers" that were known only as moving lights in the sky. Recent discoveries lead us to create a new definition, which we can make using currently available scientific information.

The IAU therefore resolves that planets and other bodies, except satellites, in our Solar System be defined into three distinct categories in the following way:

- (1) A planet<sup>1</sup> is a celestial body that
  - (a) is in orbit around the Sun,
  - (b) has sufficient mass for its self-gravity to overcome rigid body forces so that it assumes a hydrostatic equilibrium (nearly round) shape, and
  - (c) has cleared the neighbourhood around its orbit.
- (2) A "dwarf planet" is a celestial body that
  - (a) is in orbit around the Sun,
  - (b) has sufficient mass for its self-gravity to overcome rigid body forces so that it assumes a hydrostatic equilibrium (nearly round) shape<sup>2</sup>,
  - (c) has not cleared the neighbourhood around its orbit, and
  - (d) is not a satellite.
- (3) All other objects<sup>3</sup>, except satellites, orbiting the Sun shall be referred to collectively as "Small Solar System Bodies".

<sup>1</sup> The eight planets are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.

<sup>2.</sup> An IAU process will be established to assign borderline objects into either dwarf planet and other categories.

<sup>3.</sup> These currently include most of the Solar System asteroids, most Trans-Neptunian Objects (TNOs), comets, and other small bodies.



## **RESOLUTION 6**

## Pluto

The IAU further resolves:

Pluto is a "dwarf planet" by the above definition and is recognized as the prototype of a new category of Trans-Neptunian Objects<sup>1</sup>.

<sup>1</sup> An IAU process will be established to select a name for this category.