### Altimetry session summary (Tue: 14:45-15:50)

#### **Background:**

Spaceborne Laser altimeters

(Past, Present, Future)

Clementine, MOLA, ICESAT,

MESSENGER, Calipso,

SELENE, LOL, Bepi-Colombo,

(DAWN) .....

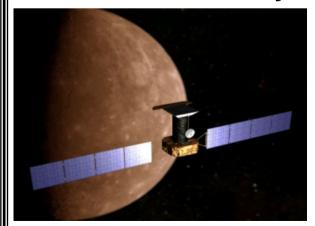
An essential tool for Planetary exploration .....

### Degnan et al.,

# Second-Generation Scanning, 3D Imaging Lidars Based on Photon-Counting.

Second generation photon counting imaging lidars provide contiguous, high resolution, wide swath 3D topographic and polarimetric maps on a single overflight ... Many potential applications from volumetric biomass mapping, mapping through turbid water columns .... Planetary mapping. Cheap, low mass.

## Michaelis et al., BELA, A Laser Altimeter for Mercury.



Launch: 2013, Arrival: 2019, Mapping: 2 yrs 400 x 1500 km 1m accuracy

### Jiruousek et al.

Timing System for Planetary Laser
Altimeter Technology
Demonstrator.

Burris et al., Lasercomm at sea.

125 Mbps Fast Ethernet ship-to-ship laser communication data transmission - over 11 nautical miles.