

# “LiDAR a modern optical tool for distance and speed measurement of fluids and solids”

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## Abstract:

Lidar, sometimes called as abbreviation of Laser and ranging is a remote sensing technology that measures distance and movement by illuminating a target with a Laser and analyzing the reflecting light by Doppler-Shift and time delay for the movement speed and the distance.

Lidar goes back to the 1960s and finds applications in atmospheric physics and distance measurements for contour mapping and collision control.

The technology finds currently new applications in the automotive field for autonomous driving and in the wind energy sector.

Low cost MEMS technology provides scanning mirrors for the application in 3D Laser cameras and high power narrow band Laser diodes allow low cost Lidar systems for distant wind speed measurements for forward looking load control.

New device technologies with lower costs open new applications fields for an established technology.