

**Dr. Guillermo Aguilar**

**Plática:**

"New trends on the use of thermo-mechanical procedures to assist laser medical applications"

The improvement of auxiliary cooling procedures to prevent unintended heating damage for a variety of dermatologic procedures has proven to be a successful approach that has improved the performance of many energy-based commercial devices (lasers, IPL, RF, etc.) Likewise, the auxiliary use of local vacuum pressure to modify temporarily the mechanical and/or optical properties of human skin has also taken hold on many new energy-based commercial devices. Much of the work done on both fronts, i.e., improvement of protective cooling and vacuum-assisted procedures, was pioneered and initially developed by me and other researchers at the beginning of this decade. I will present an overview of this work as well as new approaches on the use of pressure, cooling (cryogenic) and heating (laser/IPL) procedures targeted toward different biomedical applications.