

MASTER COURSE ON LASER & LIGHT TECHNOLOGY FOR  
AESTHETIC & NON-AESTHETIC APPLICATIONS , BELGIUM

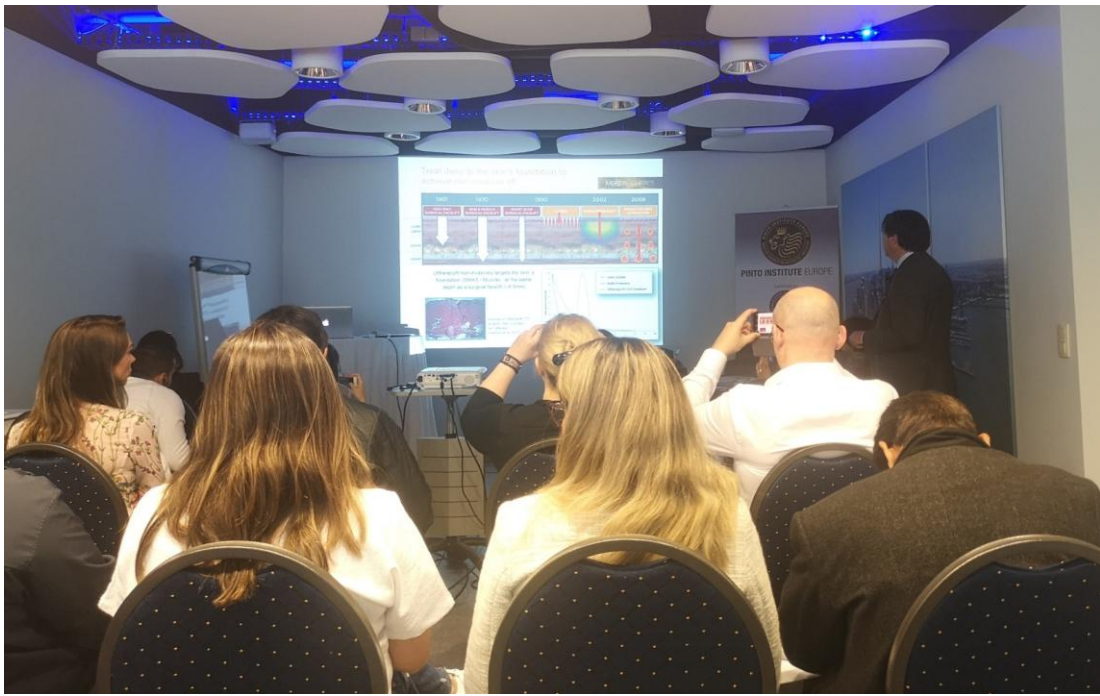
23-24/05/2019



**BELGIAN LASER INSTITUTE**

**23RD & 24TH OF MAY 2019**  
Scientific teaching course on Laser & Light-Based Technologies

**Master course on  
LASER & LIGHT TECHNOLOGY  
for aesthetic & non-aesthetic  
applications**



### Treat deep to the skin's foundation to achieve non-invasive lift

MERZ AESTHETICS

Year	Treatment	Target Depth
1901	SKIN ONLY SURGICAL FACELIFT	1.0MM (Epidermis)
1970	SKIN & MUSCLE SURGICAL FACELIFT	1.5MM (Dermis)
1990	SHORT SCAR SURGICAL FACELIFT	3.0MM (SMAS)
2002	LASERS	~1.0MM
2002	RADIO-FREQUENCY	~1.5MM
2009	NEURO-FOCUSED ULTRASOUND	~4.5MM (Muscle)

Ultherapy® non-invasively targets the skin's foundation (SMAS / Muscle) - at the same depth as a surgical facelift (~4.5mm)

History of Ultherapy® TCP at depth. Skin's surface isn't affected. (Laubach et al, 2007)

Graph: Non-injury (%) vs Depth (mm).  
 - Laser 1320nm: High peak at ~1.0mm, drops to 0% by 2.0mm.  
 - Radio-Frequency: Moderate peak at ~1.5mm, drops to 0% by 3.0mm.  
 - Ultherapy D57-3.0 Transducer: Low peak at ~4.5mm, drops to 0% by 6.0mm.

small vessel      large vessel

short heating pulse (High power): Temperature spikes above critical temperature for both small and large vessels.

longer heating pulse (Medium power): Temperature reaches critical temperature for the large vessel but not the small vessel.

long heating pulse (Low power): Temperature reaches critical temperature for both small and large vessels.





