



# LAMMELIS

## Lasers in Medicine and Life Sciences

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Advanced summer school for undergraduate or postgraduate students of medicine and physics. 30th June — 9th July 2016, Szeged

# Programme.

30 Jun (Thu)	1 Jul (Fri)	2 Jul (Sat)	3 Jul (Sun)	
<b>AM</b> ▶ Arrival	▶ 9 <sup>00</sup> –10 <sup>30</sup> • <b>Péter Maróti</b> , <i>Lasers in biophysics: why is laser light unique?</i>	▶ 9 <sup>00</sup> –10 <sup>30</sup> • <b>Ferenc Bari</b> , <i>What did we learn about microcirculation using lasers</i>	▶ Excursion: Ópusztaszer Heritage Park	
<b>Break</b>	▶ 10 <sup>45</sup> –12 <sup>15</sup> • <b>Simona M Cristescu</b> , <i>Sniffing volatiles released from biological samples with laser-based instrumentation</i>	▶ 10 <sup>45</sup> –12 <sup>15</sup> • Laboratory visit: telemedicine		
<b>PM</b> ▶ 14 <sup>00</sup> –15 <sup>00</sup> • Registration	▶ 13 <sup>00</sup> –14 <sup>00</sup> • Lunch	▶ 13 <sup>00</sup> –14 <sup>00</sup> • Lunch		
▶ 15 <sup>00</sup> –15 <sup>30</sup> • <b>Lajos Kemény – Ferenc Bari</b> , <i>Opening ceremony</i>	▶ 14 <sup>00</sup> –15 <sup>30</sup> • <b>Pál Ormos</b> , <i>Optical manipulation</i>	▶ Sightseeing in Szeged	▶ Excursion: Ópusztaszer Heritage Park	
▶ 15 <sup>45</sup> –17 <sup>15</sup> • <b>Katalin Varjú</b> , <i>The ELI-ALPS infrastructure – Basics of high-energy short pulsed lasers</i>	▶ 15 <sup>45</sup> –17 <sup>15</sup> • <b>Tomáš Čížmár</b> , <i>Photonics in disordered environments and fibre-based imaging</i>			
▶ 19 <sup>00</sup> –22 <sup>00</sup> • Welcome party				
4 Jul (Mon)	5 Jul (Tue)	6 Jul (Wed)	7 Jul (Thu)	8 Jul (Fri)
<b>AM</b> ▶ 9 <sup>00</sup> –10 <sup>30</sup> • <b>Justin Molloy</b> , <i>Optical tweezers</i>	▶ 9 <sup>00</sup> –10 <sup>30</sup> • <b>Adrian Podoleanu</b> , <i>Optical coherence tomography (OCT)</i>	▶ 8 <sup>30</sup> –10 <sup>00</sup> • <b>Zs Bere – M Csanády – B Sztanó – G Vass – J G Kiss</b> , <i>Lasers in otolaryngology</i>	▶ 9 <sup>00</sup> –10 <sup>30</sup> • <b>Katalin Hideghéty</b> , <i>Ionising radiation for cancer treatment</i>	▶ 9 <sup>00</sup> –10 <sup>30</sup> • <b>Kinga Turzó – Zsolt Tóth</b> , <i>Lasers for dental applications</i>
▶ 10 <sup>45</sup> –12 <sup>15</sup> • <b>Martin Leahy</b> , <i>Microcirculation imaging with light and sound</i>	▶ 10 <sup>45</sup> –12 <sup>15</sup> • <b>Attila Thury</b> , <i>OCT in coronary interventions</i>	▶ 10 <sup>30</sup> –13 <sup>00</sup> • Visit to the ELI site	▶ 10 <sup>45</sup> –12 <sup>15</sup> • <b>Jörg Pawelke</b> , <i>Radiotherapy with laser-driven particle beams</i>	▶ 10 <sup>45</sup> –12 <sup>00</sup> • <b>Márta Fülöp Papp</b> , <i>Lasers in dentistry</i>
<b>Break</b> ▶ 13 <sup>00</sup> –14 <sup>00</sup> • Lunch	▶ 13 <sup>00</sup> –14 <sup>00</sup> • Lunch	▶ 13 <sup>00</sup> –14 <sup>00</sup> • Lunch	▶ 13 <sup>00</sup> –14 <sup>00</sup> • Lunch	▶ 12 <sup>30</sup> –13 <sup>30</sup> • Lunch
<b>PM</b> ▶ 14 <sup>00</sup> –15 <sup>30</sup> • <b>András Lukács</b> , <i>Transient absorption and fluorescence spectroscopy</i>	▶ 14 <sup>00</sup> –16 <sup>00</sup> • Laboratory visit: OCT	▶ 14 <sup>00</sup> –15 <sup>30</sup> • <b>Magdolna Gaál</b> , <i>Lasers in dermatology</i>	▶ 14 <sup>00</sup> –15 <sup>30</sup> • <b>Elke Beyreuther</b> , <i>Radiobiology of pulsed particle beams</i>	▶ 14 <sup>00</sup> –17 <sup>00</sup> • Laboratory visits in the Biological Research Centre
▶ 15 <sup>45</sup> –17 <sup>15</sup> • <b>Beáta Bugyi</b> , <i>TIRF microscopy</i>	▶ 16 <sup>00</sup> –17 <sup>00</sup> • Laboratory visit: lasers in ophthalmology	▶ 16 <sup>00</sup> –17 <sup>00</sup> • Laboratory visit: lasers in dermatology	▶ 16 <sup>00</sup> –17 <sup>00</sup> • Laboratory visit: high-intensity laser laboratory	