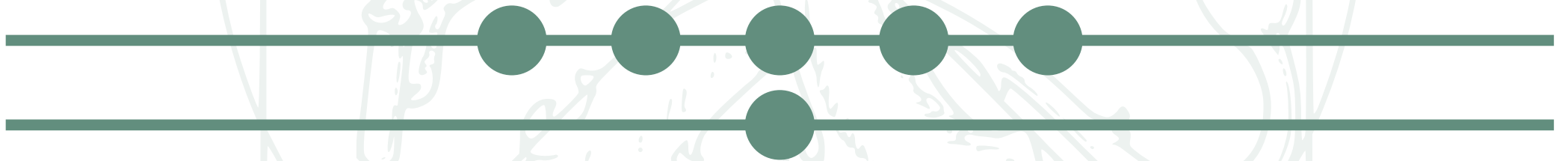




LAMMELIS

Lasers in Medicine and Life Sciences



Advanced summer school for undergraduate and postgraduate students of medicine and physics. 4th — 12th July 2019, Szeged

Programme.

	4 Jul Thu	5 Jul Fri	6 Jul Sat	7 Jul Sun	
AM	<ul style="list-style-type: none"> ▶ 9⁰⁰–10⁰⁰ • Registration ▶ 10⁰⁰–10³⁰ • Ferenc Bari and Gábor Szabó, <i>Opening ceremony</i> ▶ 10³⁰–12⁰⁰ • László Égerházi, <i>Basics of high-energy, short pulsed lasers</i> 	<ul style="list-style-type: none"> ▶ 9⁰⁰–10³⁰ • Zsolt Tóth, <i>Lasers for dental applications</i> ▶ 11⁰⁰–11⁵⁰ • Zsolt Tóth, <i>Application of lasers for surface treatment of titanium implants</i> 	<ul style="list-style-type: none"> ▶ 9⁰⁰–10³⁰ • Zsolt Geretovszky, <i>3D printing: the manufacturing technology that revolutionises medical treatments</i> ▶ 11⁰⁰–11⁴⁵ • Ferenc Bari, <i>3D tissue printing</i> ▶ 12⁰⁰–12⁴⁵ • Endre Varga, <i>Safe and predictable surgeries with 3D-printed templates</i> 	<ul style="list-style-type: none"> ▶ Excursion: Ópusztaszer Heritage Park 	
Break	▶ 13 ⁰⁰ –14 ⁰⁰ • Lunch	▶ 13 ⁰⁰ –14 ⁰⁰ • Lunch	▶ 13 ⁰⁰ –14 ⁰⁰ • Lunch	▶ 13 ⁰⁰ –14 ⁰⁰ • Lunch	
PM	<ul style="list-style-type: none"> ▶ 14⁰⁰–15³⁰ • Martin Leahy, <i>Microcirculation imaging with light and sound</i> ▶ 16⁰⁰–17³⁰ • Ferenc Bari, <i>What did we learn about microcirculation using lasers?</i> ▶ 19⁰⁰–22⁰⁰ • Welcome party 	<ul style="list-style-type: none"> ▶ 14⁰⁰–14⁵⁰ • Rózsa Dégi, <i>Lasers in ophthalmology</i> ▶ 15⁰⁰–15⁵⁰ • Attila Thury, <i>Application of optical coherence tomography in coronary interventions</i> ▶ 16¹⁵–17¹⁵ • Laboratory visit: lasers in ophthalmology 	<ul style="list-style-type: none"> ▶ Free period 	<ul style="list-style-type: none"> ▶ Excursion: Ópusztaszer Heritage Park 	
	8 Jul Mon	9 Jul Tue	10 Jul Wed BRC	11 Jul Thu ELI	12 Jul Fri
AM	<ul style="list-style-type: none"> ▶ 9⁰⁰–10³⁰ • Péter Makra, <i>Introduction to Fourier analysis</i> ▶ 11⁰⁰–12³⁰ • Adrian Podoleanu, <i>Optical coherence tomography</i> 	<ul style="list-style-type: none"> ▶ 9⁰⁰–10³⁰ • Miklós Erdélyi, <i>Localisation-based super-resolution microscopy</i> ▶ 11⁰⁰–12⁰⁰ • Laboratory visit: super-resolution microscopy ▶ 12¹⁵–12⁴⁵ • Ádám Börzsönyi, <i>Laserlab access opportunities</i> 	<ul style="list-style-type: none"> ▶ 9⁰⁰–10³⁰ • Justin Molloy, <i>Single-molecule experiments using optical tweezers</i> ▶ 11⁰⁰–12³⁰ • Petar Lambrev, <i>Ultrafast two-dimensional electronic spectroscopy</i> 	<ul style="list-style-type: none"> ▶ 9⁰⁰–10³⁰ • Katalin Hideghéty, <i>Ionising radiation for cancer treatment</i> ▶ 11⁰⁰–12³⁰ • Elke Beyreuther, <i>Radiobiology of pulsed particle beams</i> 	<ul style="list-style-type: none"> ▶ 9⁰⁰–10³⁰ • Péter Maróti, <i>Lasers in biophysics research</i> ▶ 11⁰⁰–12³⁰ • Tomáš Čížmár, <i>Holographic micro-endoscopy based on multimode waveguides</i>
Break	▶ 13 ⁰⁰ –14 ⁰⁰ • Lunch	▶ 13 ⁰⁰ –14 ⁰⁰ • Lunch	▶ 13 ⁰⁰ –14 ⁰⁰ • Lunch	▶ 13 ⁰⁰ –14 ⁰⁰ • Lunch	▶ 13 ⁰⁰ –14 ⁰⁰ • Lunch
PM	<ul style="list-style-type: none"> ▶ 14⁰⁰–15³⁰ • Beáta Bugyi, <i>Total internal reflection fluorescence microscopy in life sciences</i> ▶ 16⁰⁰–17³⁰ • András Lukács, <i>Transient absorption and fluorescence spectroscopy</i> 	<ul style="list-style-type: none"> ▶ 14⁰⁰–14⁵⁰ • Mártin Zagorac, <i>Lasers in urology</i> ▶ 15¹⁰–16⁴⁰ • Magdolna Gaál, <i>Lasers in dermatology</i> ▶ 17⁰⁰–18⁰⁰ • Laboratory visit: lasers in dermatology 	<ul style="list-style-type: none"> ▶ 14⁰⁰–16³⁰ • Laboratory visits in the Biological Research Centre 	<ul style="list-style-type: none"> ▶ 14⁰⁰–15³⁰ • Jörg Pawelke, <i>Radiotherapy with laser-driven particle beams</i> ▶ 16⁰⁰–16³⁰ • Katalin Varjú, <i>The ELI-ALPS infrastructure</i> ▶ 16³⁰–17³⁰ • ELI tour 	<ul style="list-style-type: none"> ▶ 14⁰⁰–15³⁰ • Miklós Csanády, <i>Application of endoscopic CO₂ laser surgery for benign lesions and early malignant tumours of the larynx</i> ▶ Balázs Sztanó, <i>The role of laser surgery in the treatment of upper-airway stenoses</i> ▶ Zoltán Tóbiás, <i>Endoscopic ultra dream pulse laser surgery of laryngomalacia.</i> ▶ László Szakács, <i>The role of laser surgery in the treatment of subglottic stenosis</i> ▶ 19⁰⁰–22⁰⁰ • Farewell party