Master Thesis on White Light Generation with Ultrafast Lasers



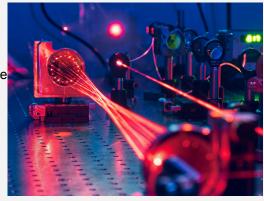
For our high-tech laser start-up

YOUR ROLE

To match our dynamic and innovative atmosphere, we are currently seeking a highly motivated and ambitious master student

Your master project would be about:

- Experimental realization of the multipass cell setup is able to generate a supercontinuum.
- Numerical simulations and design of nonlinear spectral broadening and pulse compression in a multipass cell
- Pulse characterization with autocorrelator, D-scan and SPIDER.



ABOUT YOU

- You have an affinity for experimental "hands-on" work
- You enjoy facing challenges and improvising on a daily basis
- You are a problem solver
- You have a Bachelor's degree in physics, laser engineering or similar
- You are open to learn nonlinear optics and femtosecond laser technology
- You speak fluent English

WHAT WE OFFER

- Freedom to express yourself and contribute your ideas to the product and company
- Young team with flat hierarchy
- We accept failures! How else can you learn?
- A funded position with flexible start date

OUR TECHNOLOGY AND MISSION

Ultrafast lasers with a duration of approx. 250 fs have become indispensable tools in photonics-oriented research and industry. We are performing a technology push by upgrading industrial-grade lasers to deliver pulses as short as 10 fs. Firstly, we are going to provide scientists with extremely reliable femtosecond lasers to advance frontier research in ultrafast spectroscopy, high harmonic generation and nonlinear microscopy. Secondly, we aim to satisfy the growing industrial demand in high-end micromachining applications for stable and reliable ultrafast lasers with ever shorter pulse durations. Our products are add-on modules which can be easily adapted to nearly all different types of existing laser systems.

Our team has over 17 years of cumulative experience with this technology. Our technology features unprecedented stability, reliability and life time. After receiving a public fund of over € 800k for high-tech start-ups, the n2-Photonics GmbH was founded in the beginning of 2022.

We strongly believe we can enable new applications and accelerate overall technological progress by bringing this new technology to the market! Join us to make the impossible possible.

NEXT STEPS

If you are motivated to join our team please send us your CV, motivation letter and transcript of records: Prof. Dr. Oleg Pronin | oleg.pronin@n2-photonics.de | LinkedIn or Christian Franke | christian.franke@n2-photonics.de | linkedin

