



Münchener Physik- Kolloquium

Winter
2019/20

Life, the universe and everything

Dr. Ulli Köster, *Institut Laue Langevin & Université Grenoble Alpes, France*

Monday, 9 December 2019, 17:15 h

Hörsaal 2, Physik-Department der TUM, James-Franck-Straße 1, Garching

ILL Grenoble is well-known for its research with intense neutron beams, but its high-flux reactor also permits transmuting stable targets into radionuclides, useful e.g. in nuclear medicine. For long time therapeutic applications of radiopharmaceuticals were restricted to few, relatively rare diseases (e.g. thyroid cancer), but new targeted radionuclide therapies for different types of cancer (e.g. prostate cancer) and other diseases are now coming into clinical practice. Here the development of novel targeting molecules goes hand in hand with the transition to appropriate radionuclides with optimum nuclear and chemical properties. Radionuclides with high specific activity and high purity are key ingredients for most nuclear medicine applications, but they also enable interesting experiments in basic research, namely nuclear astrophysics, particle physics and other fields. Examples from recent research with radionuclides in different fields will be presented.

Student event: Meet the speaker

We invite you to a **student-only** discussion-round with Dr. Ulli Köster before his Munich Physics Colloquium talk.

Be curious and feel free to ask any question.

Monday, 9 December 2019, 16:00 h,

Seminar room PH 3268 (upper floor), Physik-Department der TUM, James-Franck-Straße 1, Garching

