

## **ISOLDE RILIS: upgrade and development report.**

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At ISOLDE RILIS the resonance ionization of isotopes is provided by high pulse rate dye lasers. Until 2008 the dye lasers were pumped by copper vapor lasers built a long time ago in Russia. Following a plan for upgrade of the laser setup, two new 100W Nd:YAG lasers have been installed at RILIS. Operation of RILIS with the new pump lasers resulted in a noticeable improvement in the production of ion beams. In particular, the beam stability increased and higher yields have been observed. Some previously used ionization schemes are not reproducible with the Nd:YAG laser. For Mn this was addressed using the auxiliary LARIS installation by the development of a new ionization scheme which has been successfully applied for on-line experiments. Details of this and the future steps in the RILIS upgrade will be presented.

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