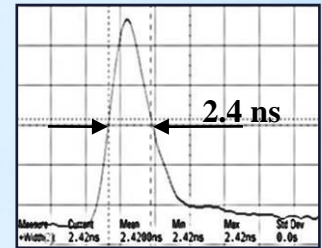
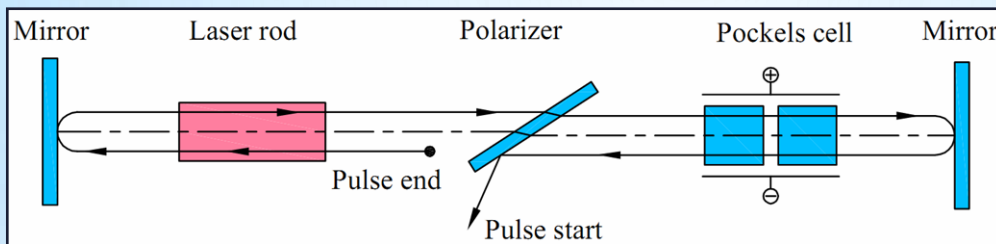


1 J@3ns 50 Hz Q-switched Nd:YAG laser at 946 nm (currently R&D)

The laser is based on scheme:

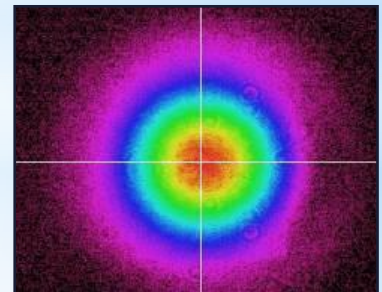
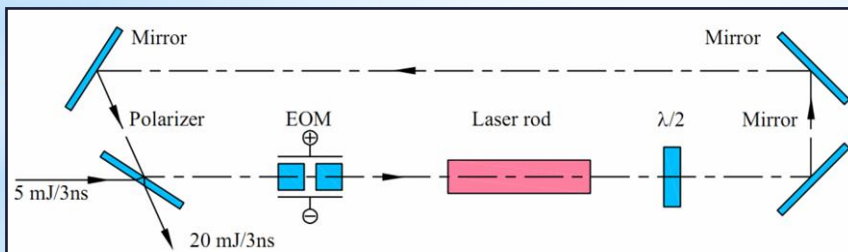
Master Oscillator → Regenerative Preamplifier → Power Regenerative Amplifier

Master oscillator: 5 mJ@3 ns Q-switched Nd:YAG at 946 nm with cavity dumping



In the **cavity dumping** mode pulse duration is equal to the time of one round-trip of the cavity: $t_p = 2L/c$. Pulse duration is short and stable!

Regenerative Preamplifier: 20 mJ@3 ns at 946 nm



Due to the deep saturation the output energy is very stable! (RMS < 4%)

Beam divergence <math>< 1.3 \times DL</math>

1 J@3 ns Power Regenerative Amplifier at 946 nm (under development)

