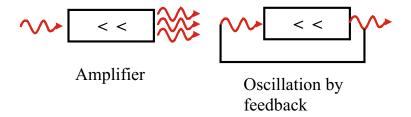
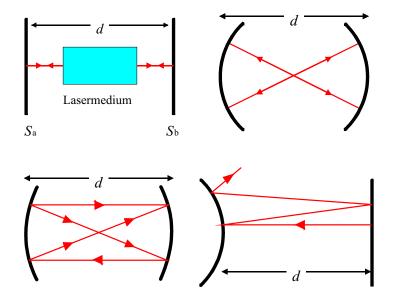
## 4.3 From amplifier to oscillator

Each amplifier can generate oscillations using a feedback system!



For a LASER this feedback is realized using a semitransparent mirror as a resonator.



- Changing the arrangement of the mirrors one can vary the fraction of the amplified light.
- To get a better "quality" of the radiation one must increase the mirror losses.
- The quality of the radiation is described by: the coherence (space and time), how parallel it is, plus time, ...