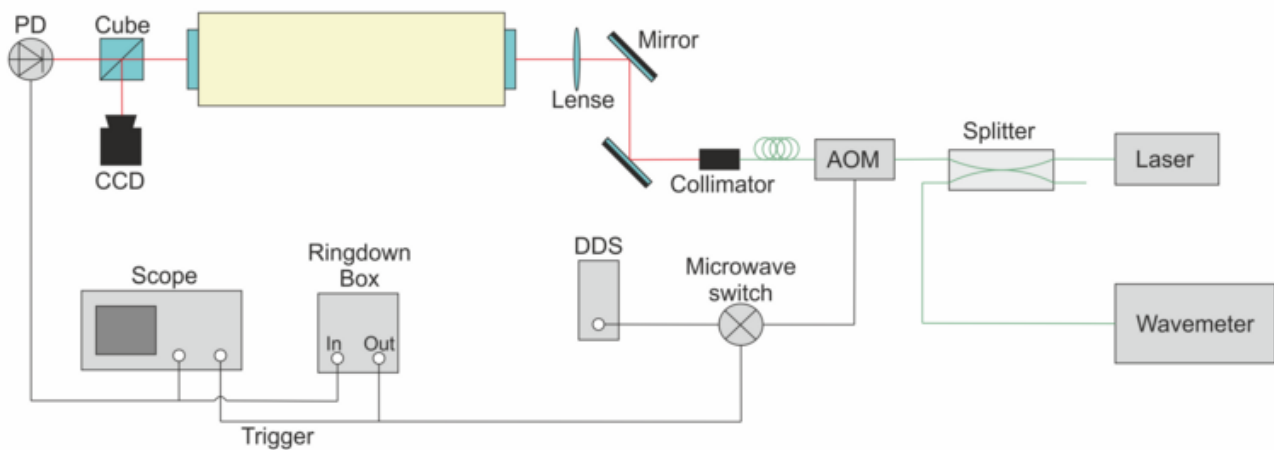


Ring-down Box

Application of the ring-down box

You can measure the finesse of a resonator with the ring-down box.



Measurement Method

Evaluation

Use this formula to analyse the datapoints:

$$y(x) = A \cdot \exp(-x/t) + y_0 \text{ with } x := \text{time}, t := \text{delay time}$$

Afterwards calculate the finesse with $F = 2\pi \cdot t \cdot \text{FSR}$ with $\text{FSR} := \text{free spectral range}$.

Electronic setup

From:

<https://iqwiki.iqo.uni-hannover.de/> - IQwiki

Permanent link:

https://iqwiki.iqo.uni-hannover.de/doku.php?id=groups:mg:ring-down_box&rev=1516179873

Last update: **2018/01/17 09:04**

