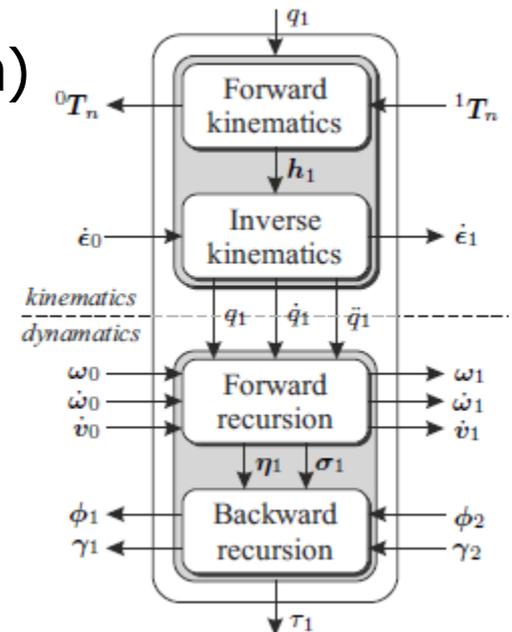


# Portierung 4DIAC Robotersteuerung

- Aufgabe / Task:
  - Adaptieren einer bestehenden IEC 61499 Implementierung (4DIAC)
  - Aufbau eines Testsystems (mit IRB 120)
  - Portierung / Verteilung der 4DIAC Applikation auf Festo CPX Kleinsteuerung(en)
- Supervisor
  - Michael Steinegger [steinegger@acin.tuwien.ac.at](mailto:steinegger@acin.tuwien.ac.at)
- Anzahl Studenten / Number of students: 1



# Advanced Motion Control for an Optical Telescope

## ■ Problem

- Commercially available telescope systems only implement a very rudimentary motion control, which is unsuitable for our research tasks.

## ■ Task

- Development, implementation and characterisation of an advanced motion control system for an optical telescope with worm drive

## ■ Supervisors

- Riel Thomas, [riel@acin.tuwien.ac.at](mailto:riel@acin.tuwien.ac.at)
- Andreas Sinn, [sinn@acin.tuwien.ac.at](mailto:sinn@acin.tuwien.ac.at)

## ■ Anzahl Studenten / Number of students: 1



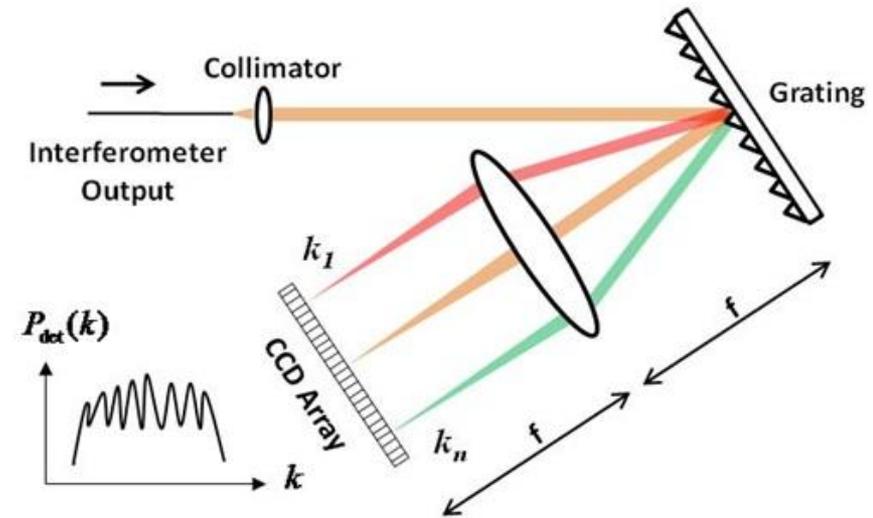
# Optical Spectrum Analyzer

## ■ Problem

- The characterisation of many optical components, such as lasers or optical modulators, requires spectral information of the emitted or transmitted light

## ■ Task

- Investigation and evaluation of a grating based optical spectrum analyzer



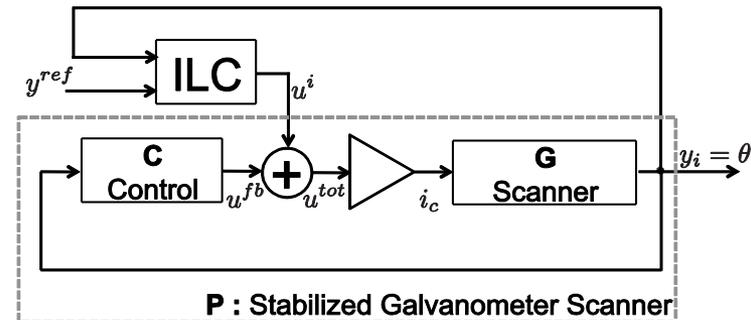
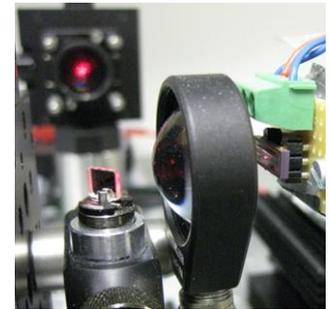
## ■ Supervisors

- Riel Thomas, [riel@acin.tuwien.ac.at](mailto:riel@acin.tuwien.ac.at)
- Andreas Sinn, [sinn@acin.tuwien.ac.at](mailto:sinn@acin.tuwien.ac.at)

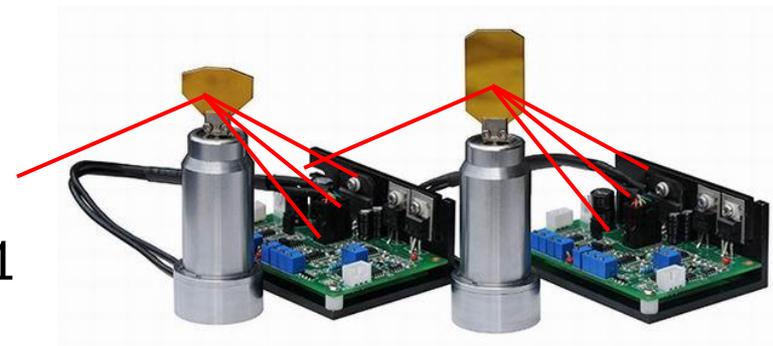
## ■ Number of students: 1

# Synchronization of two Heterogeneous Optical Scanners

- Aufgabe / Task:
  - System characterization and feedback stabilization: Galvanometer scanners
  - Design of a iterative feedforward control for synchronization of both trajectories
  - Implementation and evaluation of the developed algorithm in galvanometer scanner



- Supervisor
  - Han Woong Yoo,  
yoo@acin.tuwien.ac.at
- Anzahl Studenten / Number of students: 1



[www.sino-galvo.com/yproducts-ykeyan.aspx](http://www.sino-galvo.com/yproducts-ykeyan.aspx)