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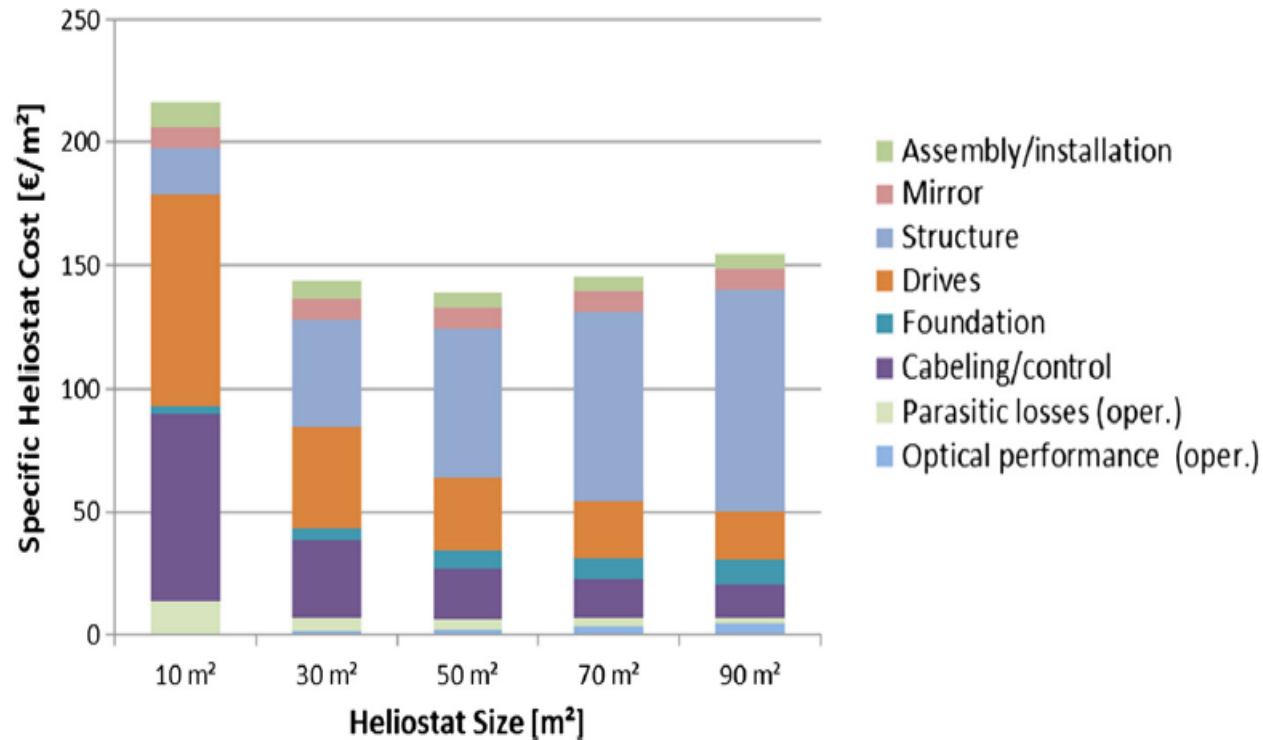
Project: Low-Cost Heliostat – mechanical design  
Advisor(s): Gregory Nellis, Michael Cheadle, Michael Wagner

Sponsor: Free State of Bavaria



# Background

## Impact of size on HeliTower's heliostat cost



Source: A. e. a. Pfahl, „Progress in heliostat development,“ *Solar Energy*, March 2017.

- In a heliostat module, the drive/s to move the mirror surfaces to track the sun is a strong cost factor.
- The cost portion depends again very much on the size of the heliostat surface.



# Project Goals

- In this concept a defined group of heliostat modules are mechanically ganged together to track the sun with one central drive system.
- As a consequence, the total cost of the drive system and the entire heliostat field of the CSP-system is reduced.
- Furthermore, the design should generally allow for low manufacturing costs while meeting all requirements.

## concept design variants

