

Nonlinear Dynamic Behavior of Azeotropic Distillation Process

with ETH Automatic Control Lab.

● Motivation

- Unusual phenomena have been reported in azeotropic distillation field
- Need a systematic analysis of steady state and dynamic behaviors to achieve efficient design and operation.

● Objective

- Analysis of complex nonlinear behaviors which the azeotropic distillation could have
- Utilize the properties to optimal design and operation.

● What we have done

- Find various bifurcation phenomena in azeotropic distillation.
- Make a physical explanation for the phenomena

