

Title: Self-Stabilizing Publish/Subscribe Systems  
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We want to design a Publish/Subscribe System such that it is self-stabilizing, i.e., it can recover its structure from any illegal state. Further goals among other things are the following: Each subscriber  $s$  should only receive publish messages for domains, to which  $s$  is subscribed to. This also means that subscriber that are not subscribed to a domain  $d$ , are not allowed to receive any publish message for  $d$ . Also, we want the average degree for each node/subscriber  $s$  to be constant per subscribed domain. The current idea is to maintain representative nodes for each domain and build a Skip+-graph over all representatives.

In this talk we give propose a first idea on how to design such a system and discuss open problems that come with this approach.