

pii/S0005109820302193
eaderless consensus means that the outputs of all agents reach a common state in a cooperative manner through dis- tributed controls
with no specified leader in the systems.
Remark 6. The main difficulty in leader—follower and leaderless
consensus control of strict-feedback nonlinear systems lies in
handling the unmatched parametric uncertaintie
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A novel local variable is generated which makes
that two consensus problems to be addressed in a unified frame— work. For leader—follower
consensus control, the assumption that the leader
is linearly parameterized with known time-varying
functions is relaxed. It is shown that global
uniform bounded— ness of all closed—loop signals
and asymptotically output con— sensus can be
achieved for both cases
The leaderless feature of the algorithms makes them
suitable for applications where the particular consensus equilibrium
is not what is important, but rather
that each system in the team converges to an identical
state. While there are many applications where there

exists a group reference trajectory (i.e. leader-following

case), there are also numerous applications where leaderless algorithms are important. Examples include rendezvous, flocking, and attitude synchronisation.

https://sci-hub.se/https://www.sciencedirect.com/science/article/abs/