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**Cooperative output regulation of linear multi-agent systems by output feedback.** (English)

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Summary: In this paper, following our recent result on the cooperative output regulation of linear multi-agent systems by a distributed full information state feedback control, we further study the same problem by a distributed measurement output feedback control under certain detectability assumptions. As the problem can be viewed as an extension of the leader-following consensus problem of the linear multi-agent systems, our result contains some existing results on the multi-agent system control as special cases.

**MSC:**

[93A14](#) Decentralized systems

[68T42](#) Agent technology and artificial intelligence

[93B52](#) Feedback control

[93C15](#) Control/observation systems governed by ordinary differential equations

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**Keywords:**

cooperative control; multi-agent systems; output regulation; output feedback

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