



**Operation-based CRDTs**

Objects whose modifications are described by *operations*

Operations can be sent over the network and applied locally by each replica,  
using a function called the *effector*

Any two concurrent operations must commute, meaning they can be applied in  
any order

S1

A dark gray circle serves as the background for the text.

Op

*S<sub>2</sub>*







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$$s_1 + \text{Op} = s_2$$

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