

Permissive Strategy Templates

QasTEL(Quantitative Specifications)²

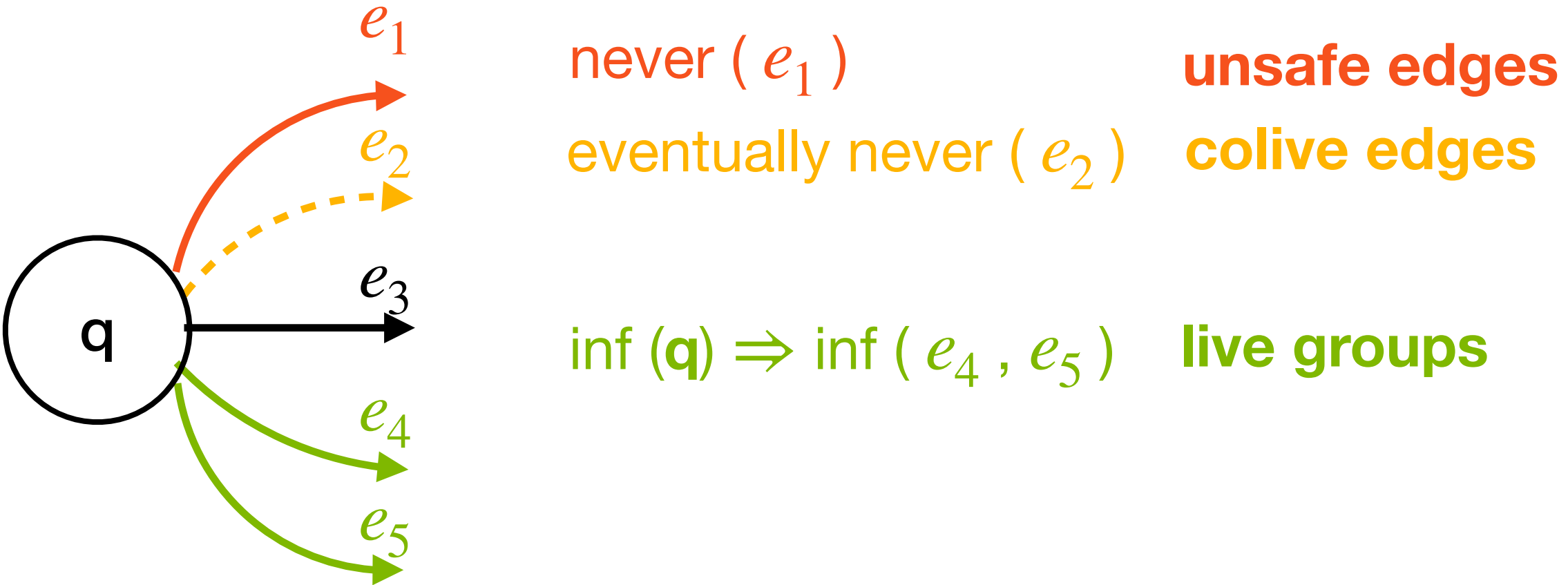


$$q, [0;2) \rightarrow \{e_1\}$$

$$q, [2;5) \rightarrow \{e_1, e_2, e_3\}$$

$$q, [5;\infty) \rightarrow \{e_4, e_5\}$$

PesTEL(Qualitative Specifications)¹



assigns local conditions on each node

assign labels budget to each node-action pair

Permissive: (almost) all strategies retained

o cheap: Does not add complexity

simple: Local Templates

1 Anand, S.P. Nayak, A-K. Singh (GAM'23): Synthesizing Permissive Mining Strategy Templates for Parity Games

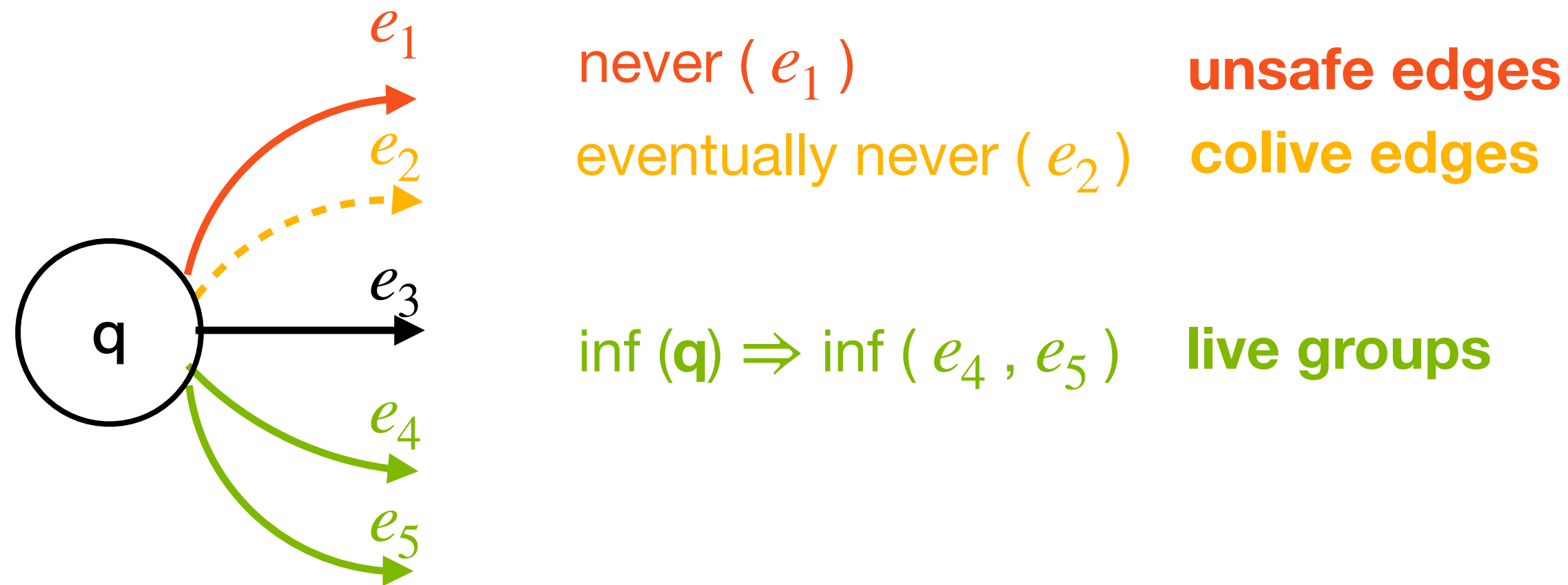
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2 Anand, S P Nayak, R. Raha, I Sağılan, A-K Schumak: Quantitative Strategy Templates

Permissive Strategy Templates

PesTEL(Qualitative Specifications)¹



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QasTEL(Quantitative Specifications)²

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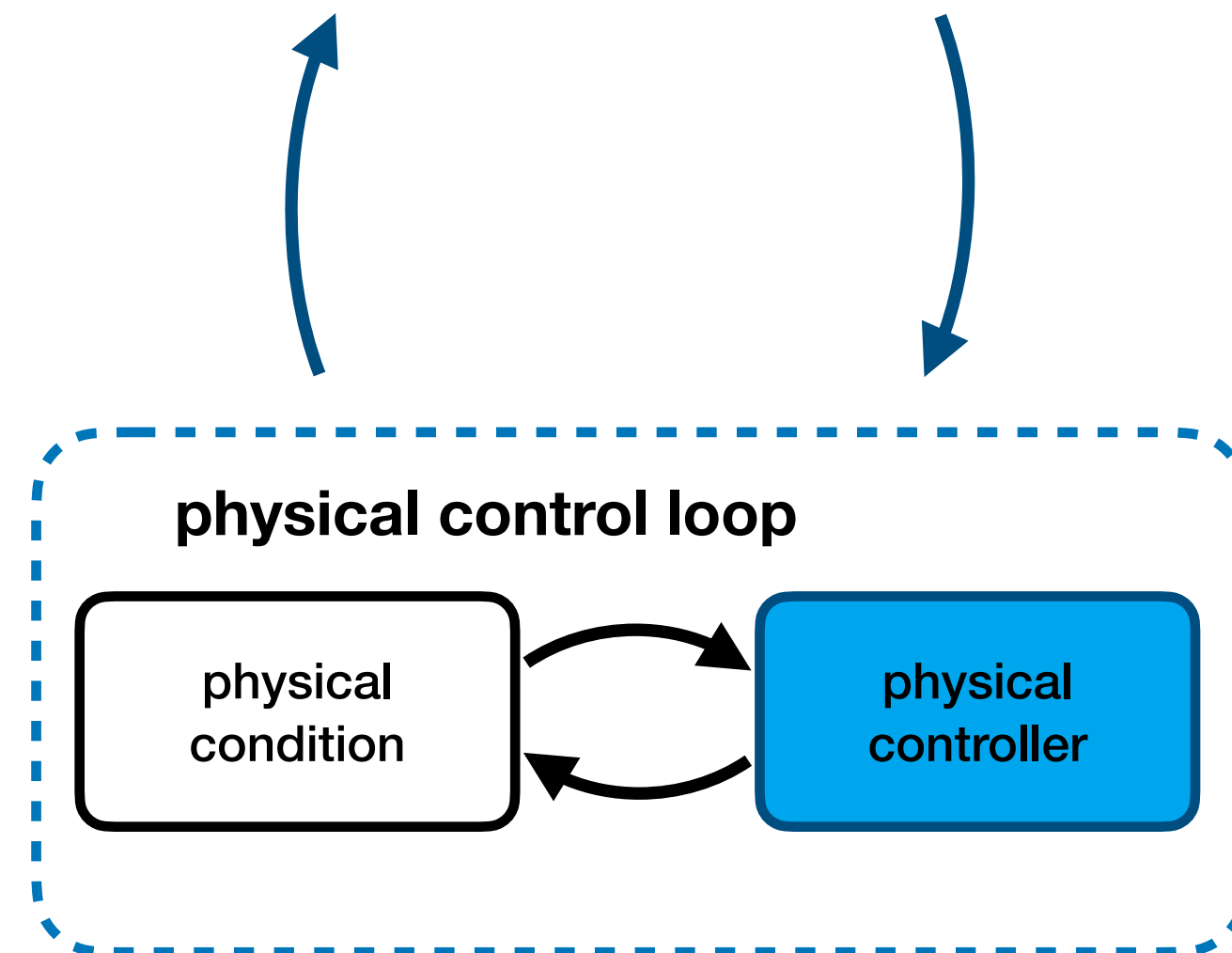
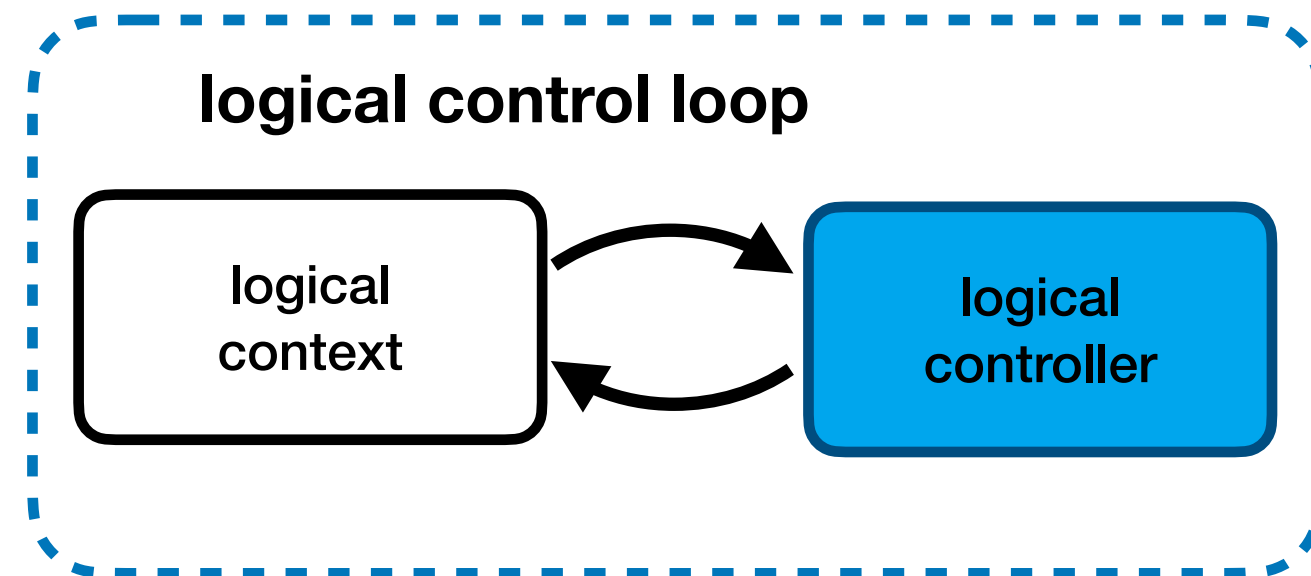
- **Permissive:** (almost) all strategies retained
- **Cheap:** Does not add complexity
- **Simple:** Local Templates

1. A. Anand, S.P. Nayak, A-K Schmuck (CAV'23): Synthesizing Permissive Winning Strategy Templates for Parity Games

2. A. Anand, S.P. Nayak, **R. Raha**, I. Sağlam, A-K Schmuck: Quantitative Strategy Templates

Integrating Logical & Physical Control

Higher Logical Layer



Lower Physical Layer