**INTRODUCTION**

A Markov Logic Network (MLN) is a set of pairs $(y \in D)$ where $F$ is a formula in first order Logic and $w$ is a real number (weight of formula). When a world violates a formula, it becomes less probable, but not impossible. Together with a set of constants, it defines a Markov network. The joint probability of smoking of every person is the same. Evidence breaks symmetry, and imposes constraints on the values variables can take. GCFOVE doesn't have approximate version.

**EVIDENCE PROCESSING & NORMAL FORM**

**LIFTING RULE 1: DECOMPOSER RULE**

- Decomposer Rule

**LIFTING RULE 2: BINOMIAL RULE**

- Binomial Rule With Constraints

**Canonical Representation**

- Only one subset constraint per variable in a constraint tuple.

**SetEq**

- Only one subset constraint per variable in a constraint tuple.

**Normal Form**

- Unconstrained representation in which

**SetInEq**

- Normal Form: No subset constraints

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