

Jasper De Bock

Ghent University Belgium

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2016 2017

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Jasper De Bock

IPG group of IDSIA Switzerland







extreme sensitivity analysis ?



extreme sensitivity analysis ?

Credal network...





...under complete independence



...under complete independence

Credal network...



...under epistemic irrelevance









Cassio Polpo de Campos^{10,4}, Fabio Gagliardi Cozman¹⁰ ⁶ Eucla de Artes, Ciencia e Hamalto, CSP Level, Carrolada de Sar Paulo, ¹⁰ Electa de Artes, Ciencia e Hamalto, CSP Level ¹⁰ Eucla Politicione, Chievendule de Sar Paulo, Sar Paulo, SP, Borel ¹⁰ Rearing 13 Dearbert 2005, rescived in revised form 30 Jane 2006, accepted 31 July 2006

de Campos & Cozman 2007

sets of probability measures, the concept of *epistemic irrelevance* is probably the casies to explain – intuitively. Y is epistemically irrelevant to X if assessments about X do no change when we observe T [56]. *Epistemic independence* is the symmetric concept X and Y are epistemically independent if each one is epistemically irrelevant to the other. Despit their intuitive content, epistemic irrelevance and epistemic independence are quite difficult

Corresponding author. *E-mult addresser*: casaio@jime.usp.br (C.P. de Campos), fgcorman@usp.br (F.G. Corman 0888-613XV5 - see front matter: © 2006 Elsevier Inc. All rights reserved. doi:10.1016/fi.mr.2006.07.013



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d-separation?



Reintroducing Credal Networks under Epistemic Irrelevance





⁸ Excelse de Arte, Chromes e Hammidade, ISS Late, Universidade de São Paulo, 10323000 Sao Paulo, SP. Bencell ^b Excelse Politerina; Universidade de São Paulo, São Paulo, SP, Buccel ^b Excelse Politerina; Universidade de São Paulo, São Paulo, SP, Buccel Received 15 December 2005; received in avvised forms 30 hane 2006; accepted 31 July 2006 Avvilable estine: 25 September 2006

de Campos & Cozman 2007

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Corresponding author.
E-mull addresser: easiol@jime.usp.br (C.P. de Campos), fgcorman@usp.br (F.G. Corman
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doi:10.1016/f.m.2006.07.013



Before PGM 2016



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PGM 2016

AD-separation

computations



Reintroducing **Credal Networks under Epistemic Irrelevance**

in terms of probabilities !



CREDAL **NETWORKS EPISTEMIC** IRRELEVANCE

THEORY AND ALGORITHMS

2015