ERRATUM TO "IMPRECISE CONTINUOUS-TIME MARKOV CHAINS: EFFICIENT COMPUTATIONAL METHODS WITH GUARANTEED ERROR BOUNDS"

To our great regret, it has come to our attention that Proposition 11 in our contribution [2] to the ISIPTA'17 conference—which is also given in the first two versions of the extended preprint [1] available on arXiv—is not correct. Fortunately, however, none of the other results in [2] depend on Proposition 11, and the main conclusions and contributions of the paper therefore remain intact.

The issue with the proof of Proposition 11—which we provide in the first two versions of the arXiv preprint [1]—is that we make the following erroneous deduction in its second part: "As we just proved that $\mathcal{X}_R \not\subseteq A$, it must hold that $\mathcal{X}_R \subseteq A^c$." Clearly, $\mathcal{X}_R \not\subseteq A$ does not imply that $\mathcal{X}_R \subseteq A^c$, but only that $\mathcal{X}_R \cap A^c \neq \emptyset$. There is no hope of fixing the proof, because there is a counterexample that shows that the statement of Proposition 11 is false. We have added this counterexample to the third version of our arXiv preprint; the interested reader can consult it there.

References

[1] Alexander Erreygers and Jasper De Bock. *Imprecise Continuous-Time Markov Chains: Efficient Computational Methods with Guaranteed Error Bounds*. 2017. arXiv: 1702.07150.

[2] Alexander Erreygers and Jasper De Bock. "Imprecise Continuous-Time Markov Chains: Efficient Computational Methods with Guaranteed Error Bounds". In: *Proceedings of the Tenth International Symposium on Imprecise Probability: Theories and Applications*. Ed. by Alessandro Antonucci et al. Vol. 62. Proceedings of Machine Learning Research. 2017, pp. 145–156.