

Implicitization of Partial Differential Rational Parametric Equations

Guangwei Li

Institute of Systems Science, Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing, 100080, China

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摘要 In this paper, we propose algorithms for the following problems in the implicitization of a set of partial differential rational parametric equations P . (1) To find a characteristic set for the implicit prime ideal of P ; (2) To find a canonical representation for the image of P ; (3) To decide whether the parameters of P are independent, and if not, to re-parameterize P so that the new parametric equations have independent parameters; (4) To compute the inversion maps of P , and as a consequence, to decide whether P is proper.

关键词 [Implicitization, partial differential rational parametric equations, rational differential varieties, unirational differential varieties](#)

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Key words [Implicitization](#) [partial differential rational parametric equations](#) [rational differential varieties](#) [unirational differential varieties](#)

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通讯作者

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