

论文

## A METHOD FOR MECHANICAL GEOMETRY THEOREM PROVING

WU Jinzhao(1), TAN Hongyan(2)

(1)Institute of Systems Science, Academia Sinica, Beijing 100080, China;(2)Department of Computer Science, Lanzhou University, Lanzhou 730000, China

收稿日期 修回日期 网络版发布日期 接受日期

**摘要** A method for mechanical geometry theorem proving is presented. By using this method, if the ascending chains derived via Wu-Ritt's well ordering algorithm satisfy a condition, all the irreducible characteristic sets we need can be obtained at the same time, and the general case can be reduced to this special case. Thus whether a geometry theorem is generally true can be decided.

**关键词** [Wu-Ritt well ordering algorithm, prime i](#)

分类号

## A METHOD FOR MECHANICAL GEOMETRY THEOREM PROVING

WU Jinzhao(1),TAN Hongyan(2)

(1)Institute of Systems Science, Academia Sinica, Beijing 100080, China;(2)Department of Computer Science, Lanzhou University, Lanzhou 730000, China

**Abstract** A method for mechanical geometry theorem proving is presented. By using this method, if the ascending chains derived via Wu-Ritt's well ordering algorithm satisfy a condition, all the irreducible characteristic sets we need can be obtained at the same time, and the general case can be reduced to this special case. Thus whether a geometry theorem is generally true can be decided.

**Key words** [Wu-Ritt well ordering algorithm](#) [prime ideals](#) [irreducible characteristic sets](#)

DOI:

通讯作者

### 扩展功能

#### 本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(0KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

#### 服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

#### 相关信息

- ▶ [本刊中 包含 “Wu-Ritt well ordering algorithm, prime i”的 相关文章](#)
- ▶ [本文作者相关文章](#)
- [WU Jinzhao](#)
- [TAN Hongyan](#)