

# LaTeX语法测试

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### 1 这是一个章节

# 1.1 DSIR double-rumors spreading model in complex networks

For there are always several kinds of rumors spreading simultaneously in real networks, the research about multiple rumors propagation process is necessary and significant. In this paper, considering the spread of two rumors with different launch time, and assuming the content of each rumor may have nothing to do with the others, we study the double-rumors concurrently spreading dynamics in complex networks, and introduce two kinds of double-rumors spreading models: the DSIR model and the C-DSIR model. We then provide the double-rumors dissemination mechanism by statesvectors expressions and derive the mean-field equations of models to describe their dynamics. Particularly, without rumors priorities, we introduce a selection parameter  $\theta$  for spreaders to express the attractions of different rumors, and study the influence of this parameter on double-rumors spreading. Numerical simulations are performed to explore the interaction between two rumors, and we investigate the spreading peak and the final size of the rumors with various parameters.

# 1.2 Information spreading with relative attributes on signed networks

During the past years, network dynamics has been widely investigated in various disciplines. As a practical and convenient description for social networks, signed networks have also garnered significant attention. In this work, we study information spreading with relative attributes on signed networks, where edges are assigned positive or negative labels, describing friendly or hostile relationships. We define the attribute of information by a degree that can be either 'good' or 'bad' and assume that the spreading willingness of the information receiver depends on not only its relation with others but also the attribute of information.

## 2 这是第二个章节: 非文本内容

#### 2.1 这是一个子章节:图片测试



图 1: 这是一个图片标题,图片里有一个可爱的女孩子

#### 2.2 这是第二个子章节:公式测试

#### 2.2.1 这是一个三级章节: 行内公式

**爱因斯坦**的<u>相对论</u>得出了得出了一个重要结论,即质能关系式:  $E=mc^2$ 

#### 2.2.2 这是第二个三级章节:单独列行公式

**克劳德·艾尔伍德·香农**是一位伟大的科学家,他在论文通信的数学原理中提出的**香农公式**为信息论和数字通信奠定了基础。

$$C = B\log_2(1 + \frac{S}{N})\tag{1}$$

### 2.3 这是第三个子章节: 表格测试

这	是	_
个	简	单
的	表	格

表 1: 这是表格的标题

## 2.4 这是第四个子章节: 列表测试

#### 2.4.1 无序列表

- 读论文
- 写代码
- 游泳

#### 2.4.2 有序列表

- 1. 下载TeX Live
- 2. 安装VScode
- 3. 安装LaTeX Workshop