

# Group Classification of the Boltzman Equation

A. P. Smith<sup>1</sup>, M. Patel<sup>2</sup>, K. K. Smirnov<sup>3</sup>

<sup>1</sup>*School of Mathematics, Suranaree University of Technology, Nakhon Ratchasima, Thailand; smith\_ap@sut.ac.th*

<sup>2</sup>*Department of Mathematics, Durban University of Technology, Durban, South Africa; patel@math.dut.ac.za*

<sup>3</sup>*Department of Mathematics, Novosibirsk State University, Novosibirsk, Russia; smirnovkk@math.nsu.ru*

This is the main body of a sample abstract. Abstracts should be written in the English language. Unnumbered equations are easy,

$$\cos 2\varphi = \cos^2 \varphi - \sin^2 \varphi.$$

Numbered equations should be as follows:

$$\sin 2\varphi = 2 \sin \varphi \cos \varphi. \quad (1)$$

Please note that all internal labels for equations [such as in equation (1) above] and all cites such as in [1, 2] should be prefixed by the author's name in the form:

*YourFamilyName:Nickname-of-reference*

For example,

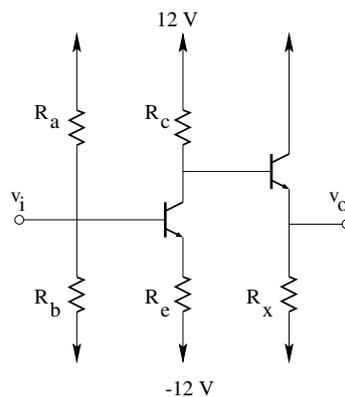
```
\begin{equation}\label{Smith:equationnumber}
  \sin 2\varphi=2\sin\varphi\cos\varphi.
\end{equation}
```

Please use the following way to format theorems, corollaries and the like. Do not use internal labels:

**Theorem 1.** *The text of the theorem.*

Please use the following way to format definitions, remarks, and examples. Do not use internal labels:

REMARK. Graphics may also be included.



We request to NOT use own macros, abbreviations or special commands: please use the standard  $\LaTeX$  commands only.

The authors gratefully acknowledge financial support by NRU grant 2021-342.

## REFERENCES

1. Ovsiyanikov L. V., *Group Analysis of Differential Equations*, Academic Press, New York (1982).
2. Moody R. V. and Patera J., *Fast recursion formula for weight multiplicities*, Bull. Amer. Math. Soc., **7**(2), 237–242 (1982).