



Title of the lecture

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ABSTRACT. The article should be written **between two and four pages** and should be prepared by means of the current style. Please write the text of the abstract here. The abstract should be written **between two and seven lines**. It **should not contain undefined abbreviations, numbered displayed formulas, figures, tables, references, and so on**. Please note that **keywords and mathematical subject classification are needed**.

Keywords: homogeneous structures, Lie group, conformal vector field (at least 2 and at most 5)

AMS Mathematics Subject Classification [2020]: 58E11, 53B30, 53C50 (at least 1 and at most 3)

1. Introduction

The extended abstract should have at most 4 pages. Papers prepared more than 4 pages or out of the style of the meeting, will be returned.

Here you should state the introduction, preliminaries and your notations. Authors are required to state clearly the contribution of the extended abstract and its significance in the introduction. There could be some short survey of relevant literature.

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Before submitting your extended abstract to the meeting, please rename its tex file by using the speaker's name (and a number, if the speaker is going to give more than one talk), e.g. if the speaker is D-Darvishi and he is going to give two talks, then the source file of the second talk should be named

D-Darvishi1.tex

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- (1) Each participant can be a (co)author of at most 2 submitted papers.
- (2) Extended abstract length: at least 2 pages and at most 4 pages.
- (3) MSC2010: at least 1 item and at most 3
- (4) Keywords: At least 2 items and at most 5 items.
- (5) Authors: Full names, affiliations and emails of all authors. (Provide the emails at the end of the paper.)
- (6) Margins: A long formula should be broken into two or more lines.
- (7) Tags (Formula Numbers): Use `\label{A}` and `\eqref{A}`. Remove unused tags.
- (8) Acknowledgement: At the end of the extended abstract but before References, if there is any
- (9) References: Use `\cite{X}` to refer to the specific book or paper [2], whose bibitem code is `\bibitem{X}`. Remove unused references. References should be listed in the alphabetical order according to the surnames of the first author at the end of the extended abstract and should be cited in the text as, e.g., [1] etc. There should be no more than 6 references.
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2. Main results

Please write the main results here.

2.1. Formulas. You are able to easily provide various types of the formulas by making use of the following instructions:

- (1) Formula within the text such as $AX + XB = C$.
- (2) Formula in a separate line without number:

$$\mathcal{K}_1(A, r_0) \subseteq \mathcal{K}_2(A, r_0) \subseteq \cdots \subseteq \mathcal{K}_d(A, r_0) = \cdots = \mathcal{K}_n(A, r_0).$$

- (3) Formula in a separate line with number:

$$(1) \quad \mathcal{K}_1(A, r_0) \subseteq \mathcal{K}_2(A, r_0) \subseteq \cdots \subseteq \mathcal{K}_d(A, r_0) = \cdots = \mathcal{K}_n(A, r_0).$$

The following is an example of definition.

DEFINITION 2.1. Here, the body of the definition should be.

Here is an example of a table.

The following is an example of an example.

TABLE 1. Your table's caption

col1	col2	col3
4	5	6
7	8	9

EXAMPLE 2.2. Let $D_\infty = \langle a, b \mid a^2 = b^2 = 1 \rangle \cong \mathbb{Z}_2 * \mathbb{Z}_2$ be the infinite dihedral group. Then

$$M^{(2)}(D_\infty) \not\cong M^{(2)}(\mathbb{Z}_2) \oplus M^{(2)}(\mathbb{Z}_2).$$

The following is an example of a theorem and a proof. Please note how to refer to a formula.

THEOREM 2.3. *If \mathbf{B} is an open ball of a real inner product space \mathcal{X} of dimension greater than 1, then there exist additive mappings $T : \mathcal{X} \rightarrow \mathcal{Y}$ and $b : \mathbb{R}_+ \rightarrow \mathcal{Y}$ such that $f(x) = T(x) + b(\|x\|^2)$ for all $x \in \mathbf{B} \setminus \{0\}$.*

PROOF. First note that if f is a generalized Jensen mapping with parameters $t = s \geq r$, then

$$\begin{aligned} f(\lambda(x+y)) &= \lambda f(x) + \lambda f(y) \\ &\leq \lambda(f(x) + f(y)) \\ (2) \quad &= f(x) + f(y) \end{aligned}$$

for some $\lambda \geq 1$ and all $x, y \in \mathbf{B} \setminus \{0\}$ such that $x \perp y$.

Step (I)- the case that f is odd: Let $x \in \mathbf{B} \setminus \{0\}$. There exists $y_0 \in \mathbf{B} \setminus \{0\}$ such that $x \perp y_0$, $x + y_0 \perp x - y_0$. We have

$$\begin{aligned} f(x) &= f(x) - \lambda f\left(\frac{x+y_0}{2\lambda}\right) - \lambda f\left(\frac{x-y_0}{2\lambda}\right) \\ &\quad + \lambda f\left(\frac{x+y_0}{2\lambda}\right) - \lambda^2 f\left(\frac{x}{2\lambda^2}\right) - \lambda^2 f\left(\frac{y_0}{2\lambda^2}\right) \\ &= 2\lambda^2 f\left(\frac{x}{2\lambda^2}\right). \end{aligned}$$

Step (II)- the case that f is even: Using the same notation and the same reasoning as in the proof of Theorem 2.3, one can show that $f(x) = f(y_0)$ and the mapping $Q : \mathcal{X} \rightarrow \mathcal{Y}$ defined by $Q(x) := (4\lambda^2)^n f((2\lambda^2)^{-n}x)$ is even orthogonally additive.

Now the result can be deduced from Steps (I) and (II) and Formula (2). \square

PROPOSITION 2.4. *This is a proposition.*

COROLLARY 2.5. *This is a corollary.*

QUESTION. *Is this a question?*

SOLUTION. *Yes.*

REMARK 2.6. This is a remark.

NOTATION 2.7. An important note is described here.

3. Numerical results

Numerical results section, if included, appears here.

3.1. Table and Figure. By making use of the `table` and `figure` environments, you are able to create a table or figure in the paper. In view of the fact that tables and figures are float environments, it is possible that they do not place exactly where you have mentioned them in the source. You can also refer to them, like Table 2 and Figure 1.

TABLE 2. Caption.

δR	$\delta R/R (10^{-3})$	$\delta V(\text{mV})$	Theoretical $\delta V(\text{mV})$
0	0.00	0.05	0.00
1	8.33	20.00	20.83

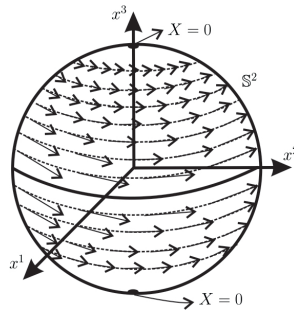


FIGURE 1. Caption.

4. Conclusion

Conclusion section is necessary. In **one-paragraph (at most four lines)**, the conclusion of the paper is described.

Acknowledgement

Acknowledgements could be placed at the end of the text but before the references.

Please cite your relevant papers but at most total 6 papers/books.

References

1. Bueken, P. (1997) *On curvature homogeneous three-dimensional Lorentzian manifolds*, J. Geom. Phys., **22**, 349–362.
2. Derdzinski, A. (1980) *Classification of certain compact Riemannian manifolds with harmonic curvature and non-parallel Ricci tensor*, Math. Z., **172**, 273–280.
3. Merton, G. (2013) *Codazzi tensors with to eigenvalue functions*, Proc. Am. Math. Soc., **141**, 3265–3273.
4. O'Neill, B. (1983), *Semi-Riemannian Geometry, with applications to relativity*, Academic Press, New York.