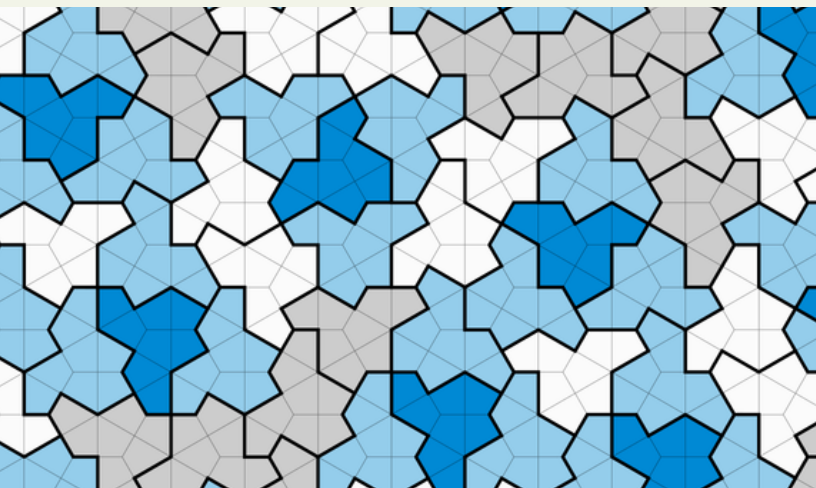


# MATH-FEED

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*MATH-FEED, THE NEWSLETTER OF THE DEPARTMENT OF MATHEMATICS, PROVIDES INSIGHT INTO THE LATEST RESEARCH CARRIED OUT IN MATHEMATICS. IT ALSO PROVIDES INFORMATION ABOUT THE HAPPENINGS IN THE DEPARTMENT.*

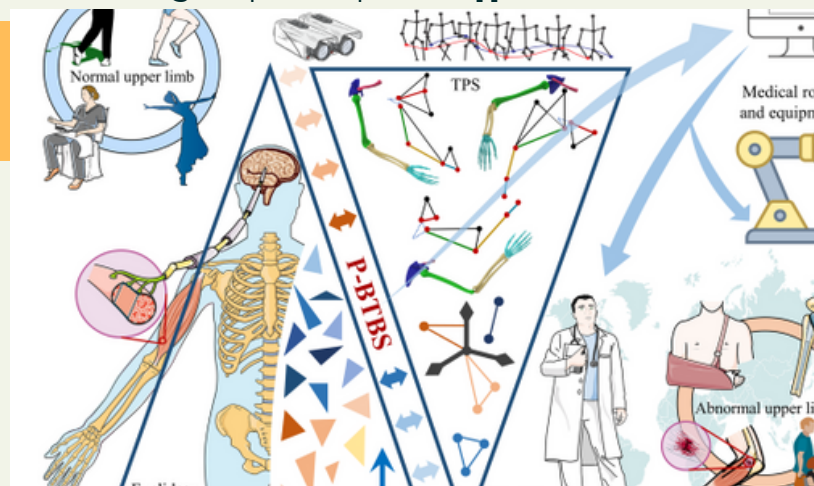


## APERIODIC MONOTILE

The "hat", a 13-sided shape can be tiled infinitely without ever repeating a pattern. It is also known as an "einstein" shape because it is a single shape that can be arranged in a tile formation, interlocking with itself. The name "einstein" comes from the German words "ein stein," meaning "one stone". This name was chosen because the shape is a single tile that can cover an entire surface without ever creating a repeated pattern. [1]

## UPPER LIMB MODELING

Modeling and motion extraction of human upper limbs are essential for interpreting the natural behavior of upper limb. Owing to the high degrees of freedom (DOF) and highly dynamic nature, existing upper limb modeling methods have limited applications. This study proposes a generic modeling and motion extraction method, named Primitive-Based triangular body segment method (P-BTBS), which follows the physiology of upper limbs, allows high accuracy of motion angles, and describes upper-limb motions with high accuracy. [2]



## SJVC CORNER



Contents in action at the debate competition

## DEBATE COMPETITION

The department of Mathematics organized a debate on the theme “Women Reservation is Women Empowerment” on 11th July 2023 on the occasion of World Population Day.

The following points were highlighted by the Proponent Team: Women are homemakers not decision makers, women are treated as puppets, reservation should be looked upon as an opportunity for women, etc. Whereas the opponents highlighted the failure of women reservation in China and other countries. It was pointed out that reservation has led to violence in some places and creditability is women empowerment.

## REFERENCES

- 1] [arXiv.org](https://arxiv.org)
- 2] Dupont, P. E. et al. A decade retrospective of medical robotics research from 2010 to 2020. *Sci. Robot.* 6(60), eabi8017 (2021)

## EDITORIAL TEAM

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