LaTeX Programming for Drawing

Olympic 2024 Pictograms

Amit Manohar Manthanwar
Principal Investigator

On the Mathematics of Art and Logical Art Design

Strategic Vision and Implementation Roadmap

A Proposal for Discussions and Further Actions

September 13, 2024

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Amit M. Manthanwar

Principal Investigator

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Outline

- Introduction and Background
- Key Challenges and Problem Statements
- Basics of Visual and Logical Design Process
- Proposed Creative and Innovative Solutions
- Impacts and Value Propositions
- Discussions and Immediate Actions

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Introduction and Background

- The Olympic Pictograms, a long and fascinating story
- Historical Olympic Pictograms
- Olympic 2024 Pictograms
  - **Head of Design:** **Joachim Roncin**
  - Copyright © The International Olympic Committee

Challenges, Scope, Objectives and Outcomes

- Key Challenges and Problem Statement
  - Holistic approaches for effective visual designing of art
- Scope: Traditional and Emerging Design Principles
  - Classical art and industrial design concepts
  - Persistent digital design concepts
- Specific Objectives
  - Design Using Vector Graphics
    - Develop integrated and harmonised approach
    - Demonstrate a system-wide whole system approach in any operational environment and print media
    - Explore synergies between the mathematics of art and art of mathematics
  - Digital Tools
    - Manage bigdata: secured storage and open access
    - For the screen using Scalable Vector Graphics
    - For the screen and print using PostScript, TEX, LATEX and friends
  - Capacity Building - Knowledge and Technology Transfer
- Expected Outcomes
  - Develop dynamic digital tools for screen and print media
  - Guidance for adaptation and policy making
  - Digital Tools for Holistic Design: Digital Twin, Data-driven, and Model-based solutions

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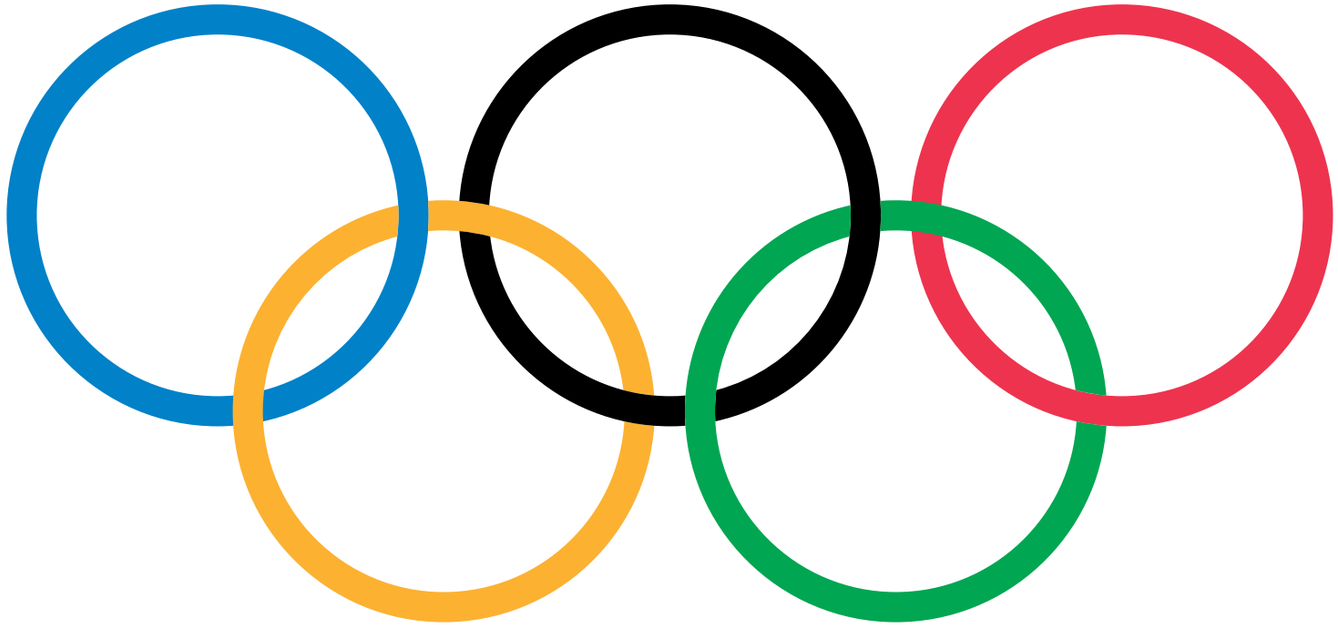
The Olympic Logo



LaTeX Code

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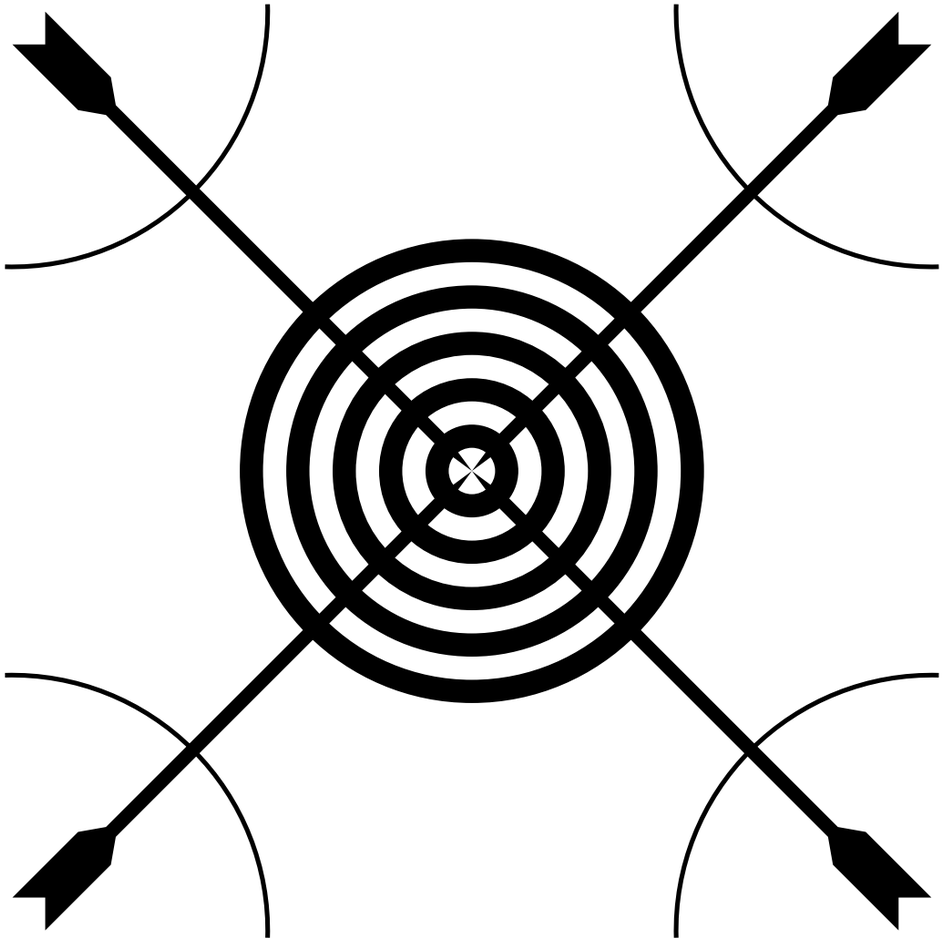
Archery



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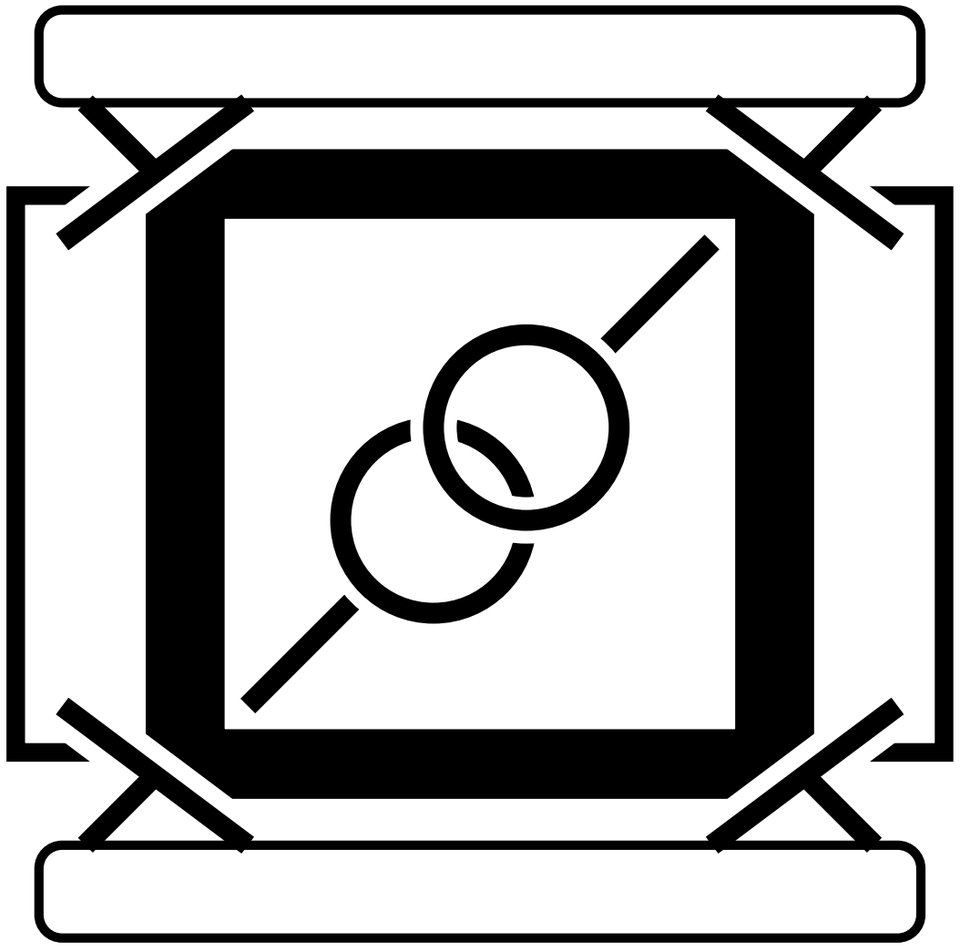
Artistic Gymnastics



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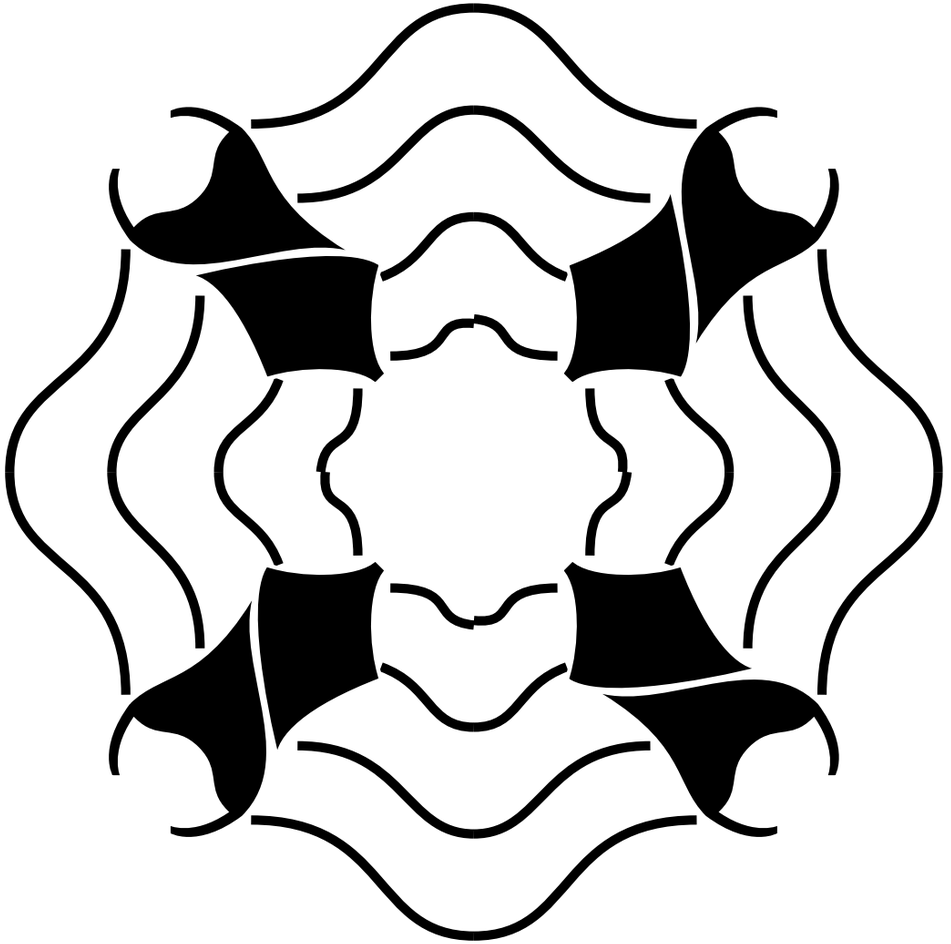
Artistic Swimming



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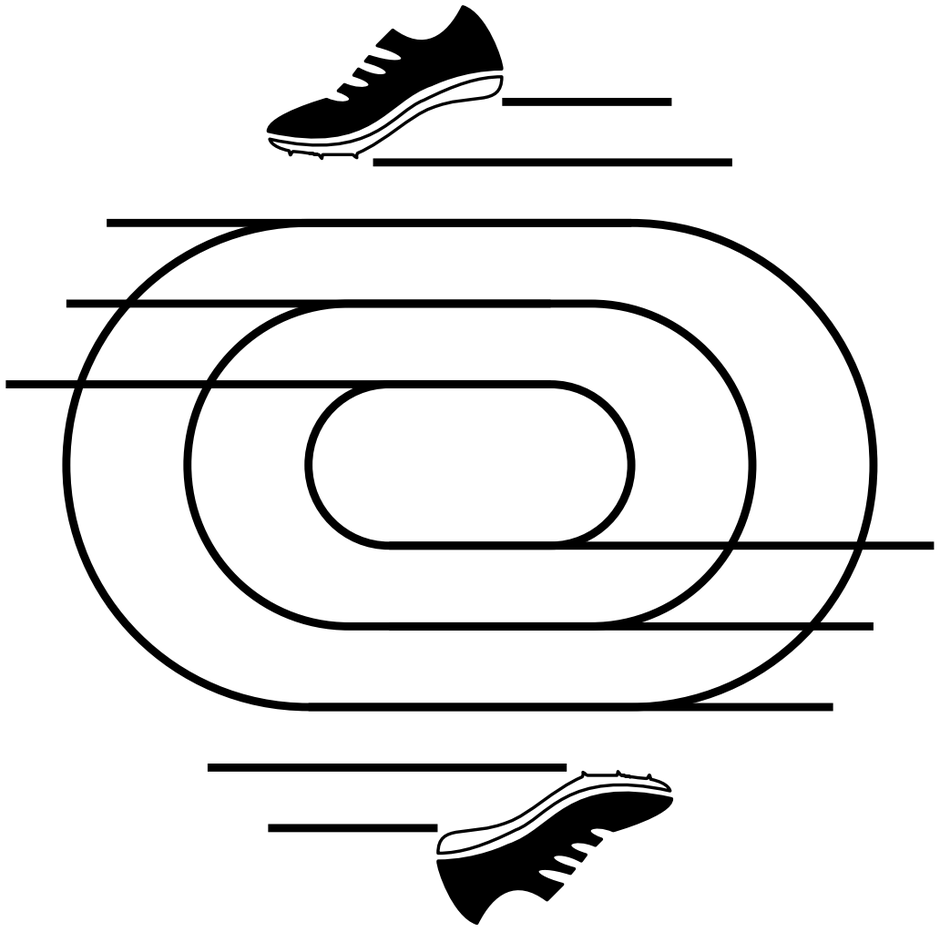
Athletics



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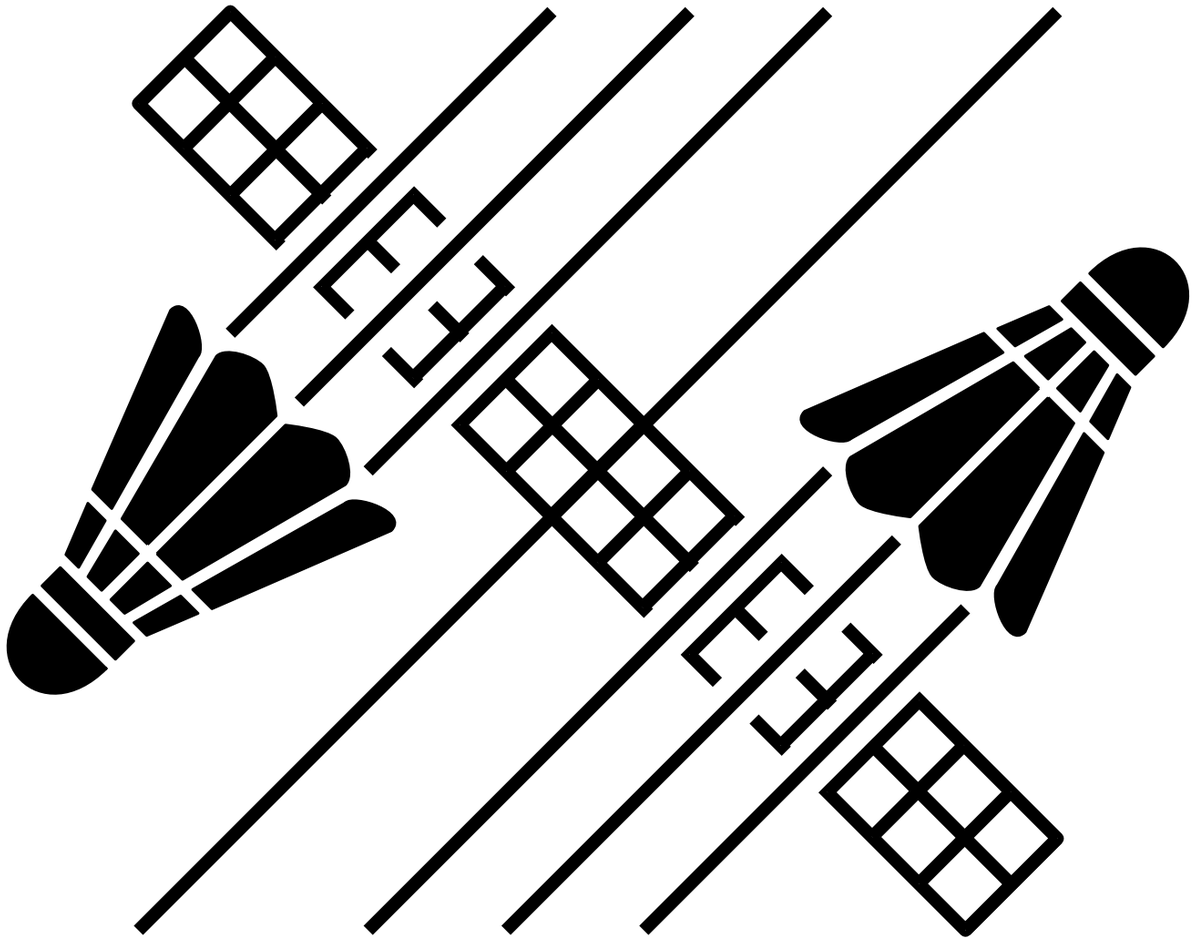
Badminton



Basketball

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Basketball Three

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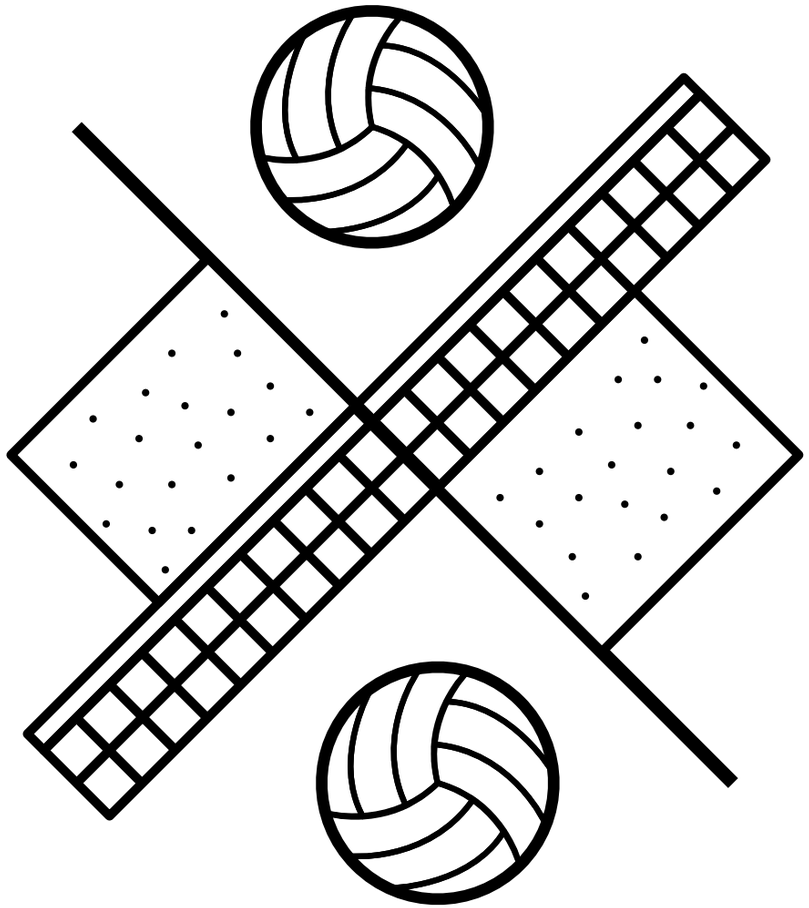
Beach Volleyball



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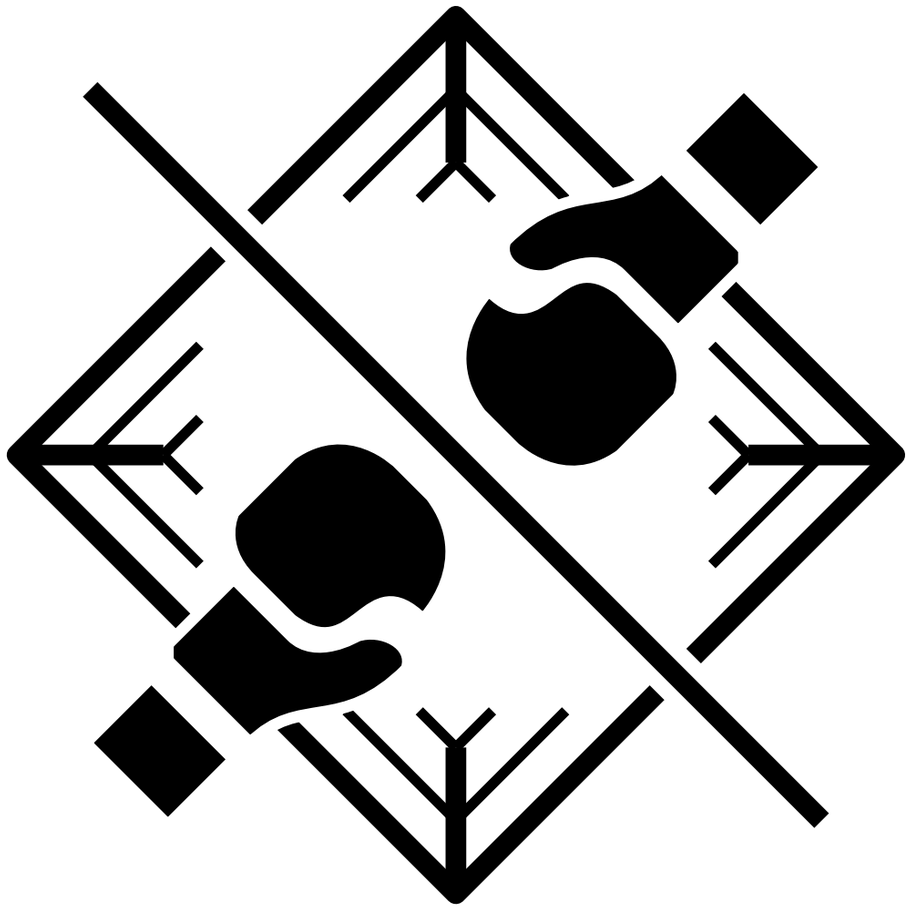
Boxing



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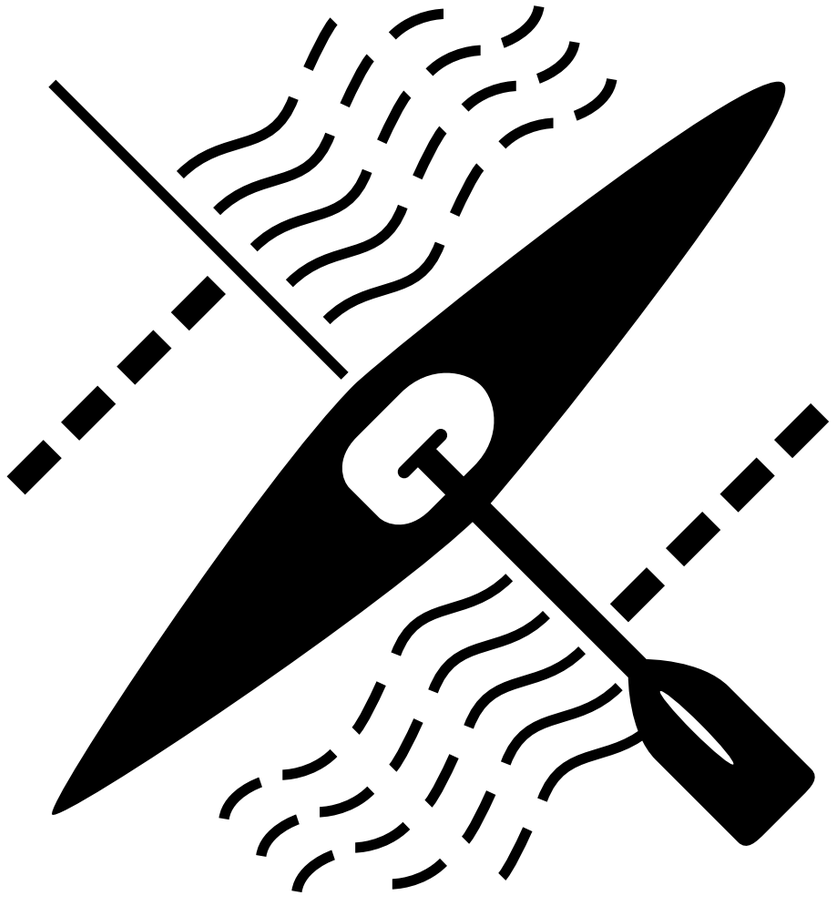
Breaking

Canoe Slalom



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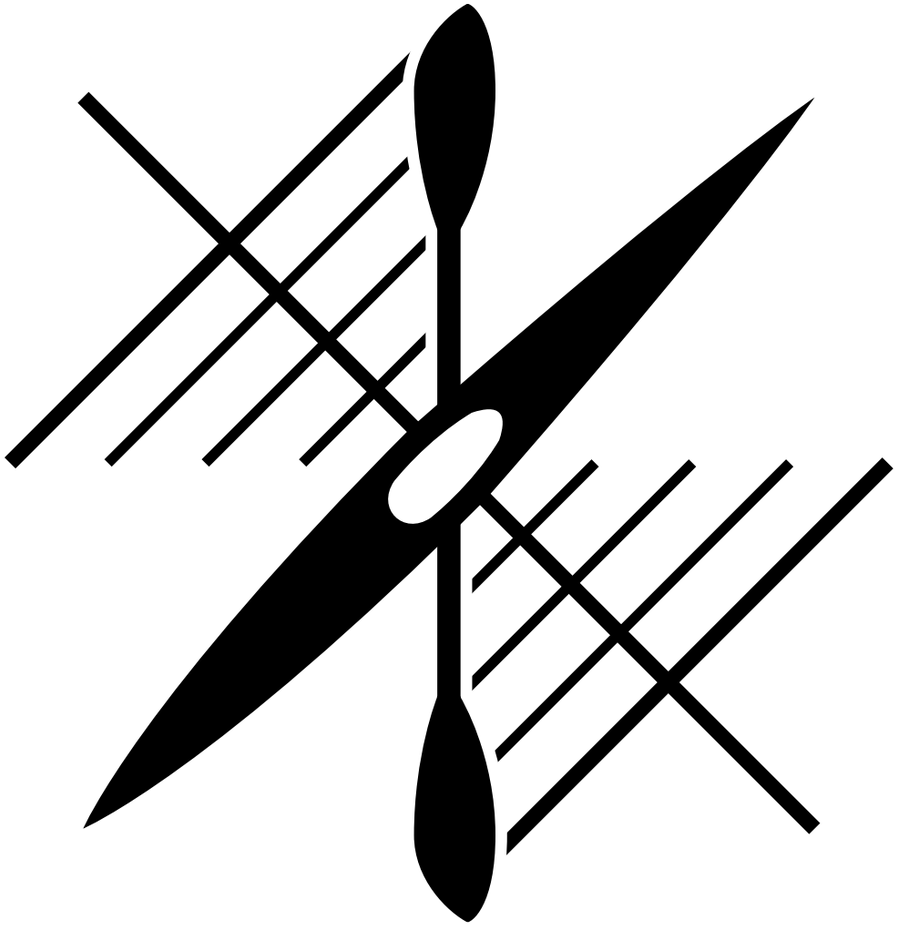
Canoe Sprint



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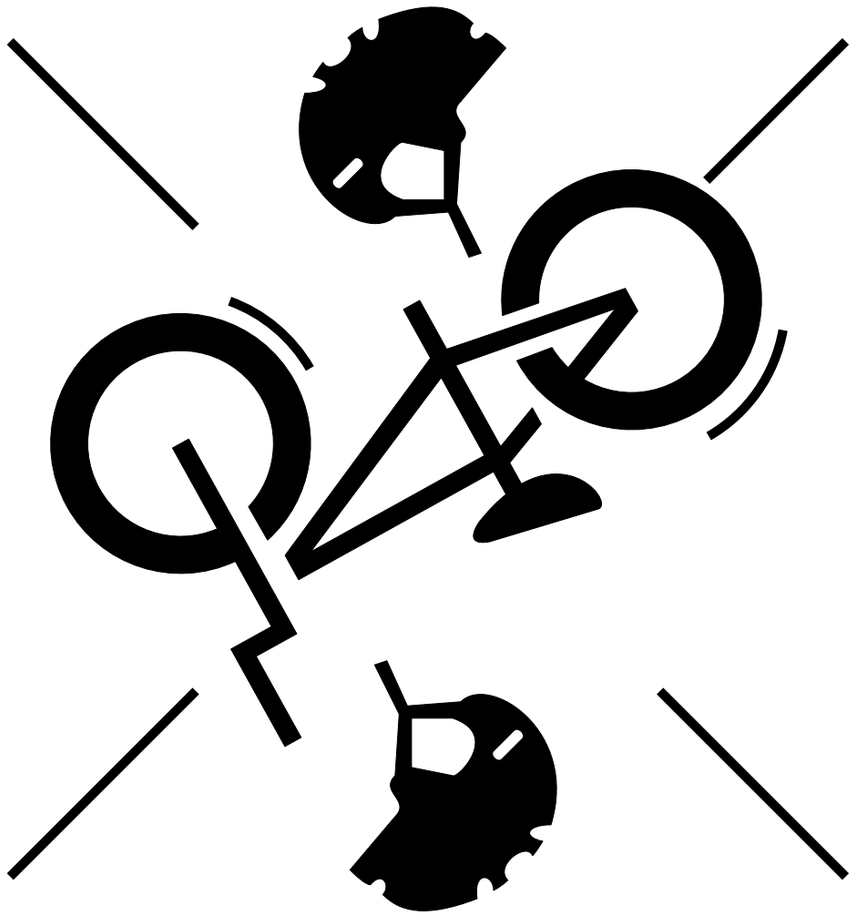
Cycling BMX Freestyle



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Cycling BMX Racing

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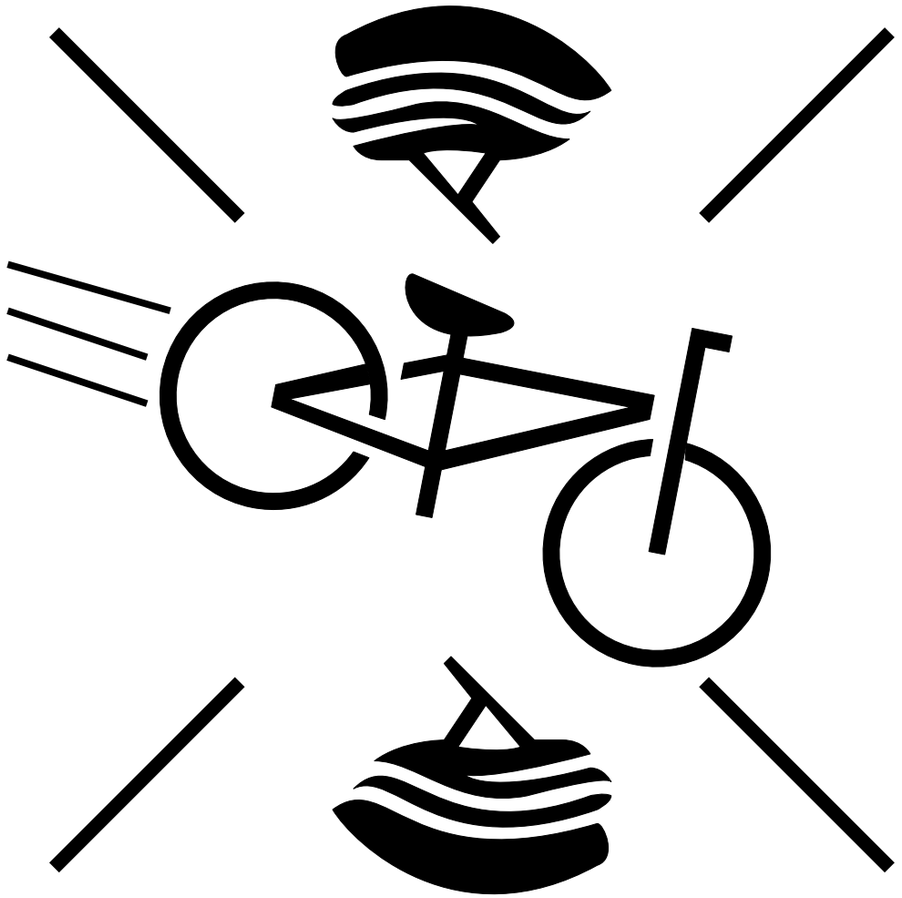
Cycling Mountain Bike



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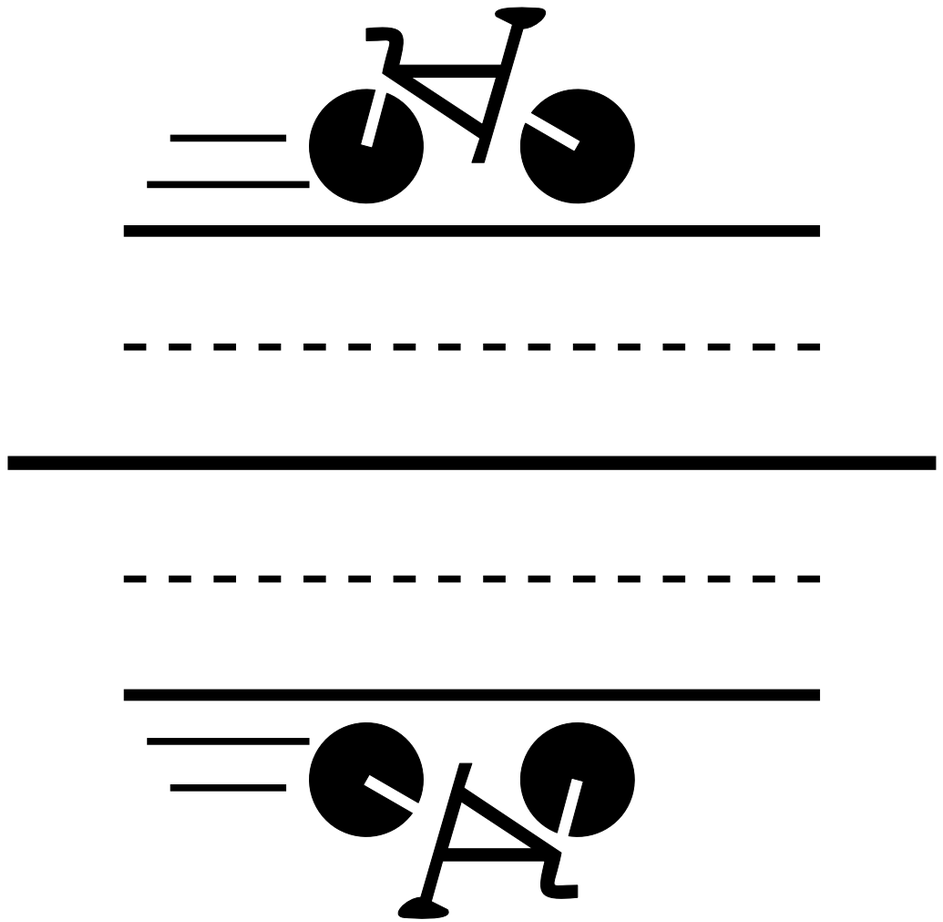
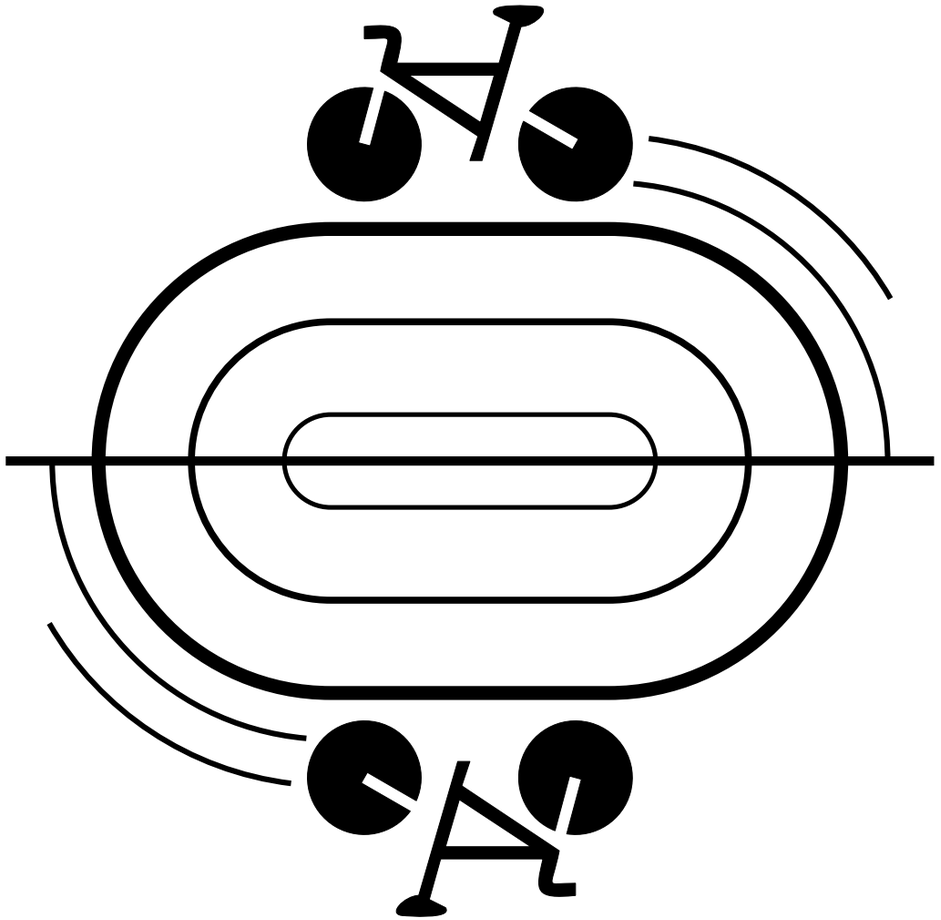
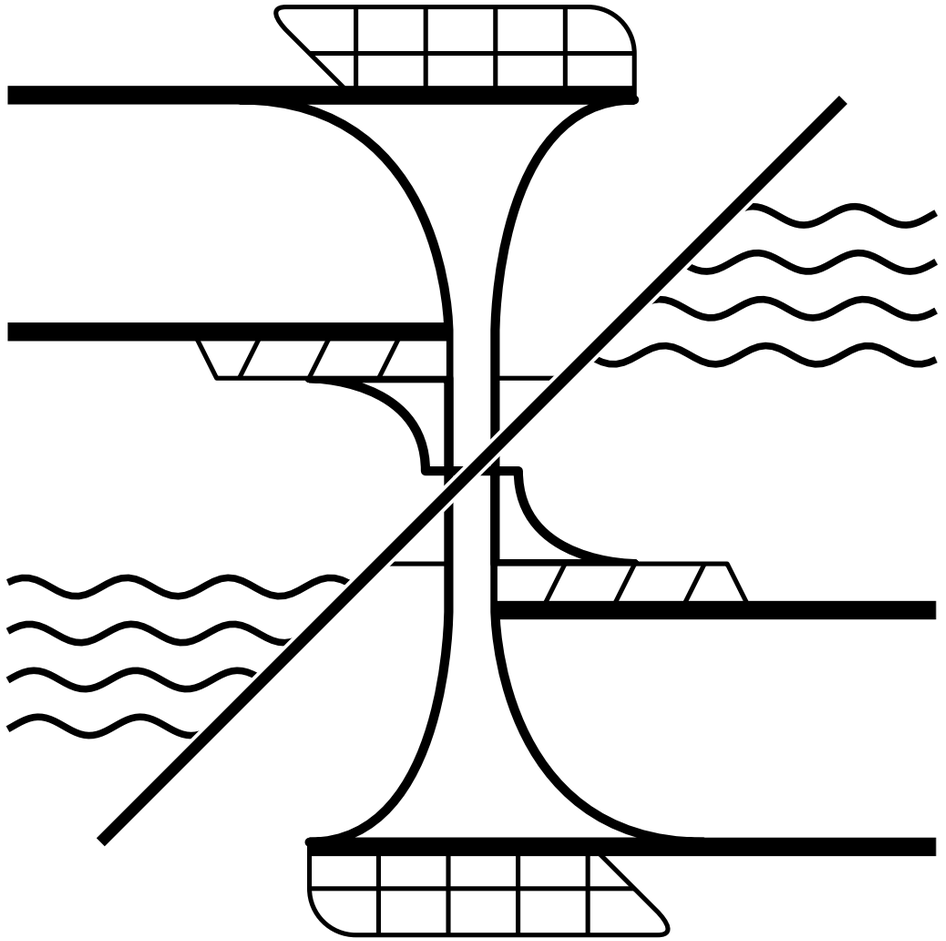
Cycling Road



Cycling Track



Diving



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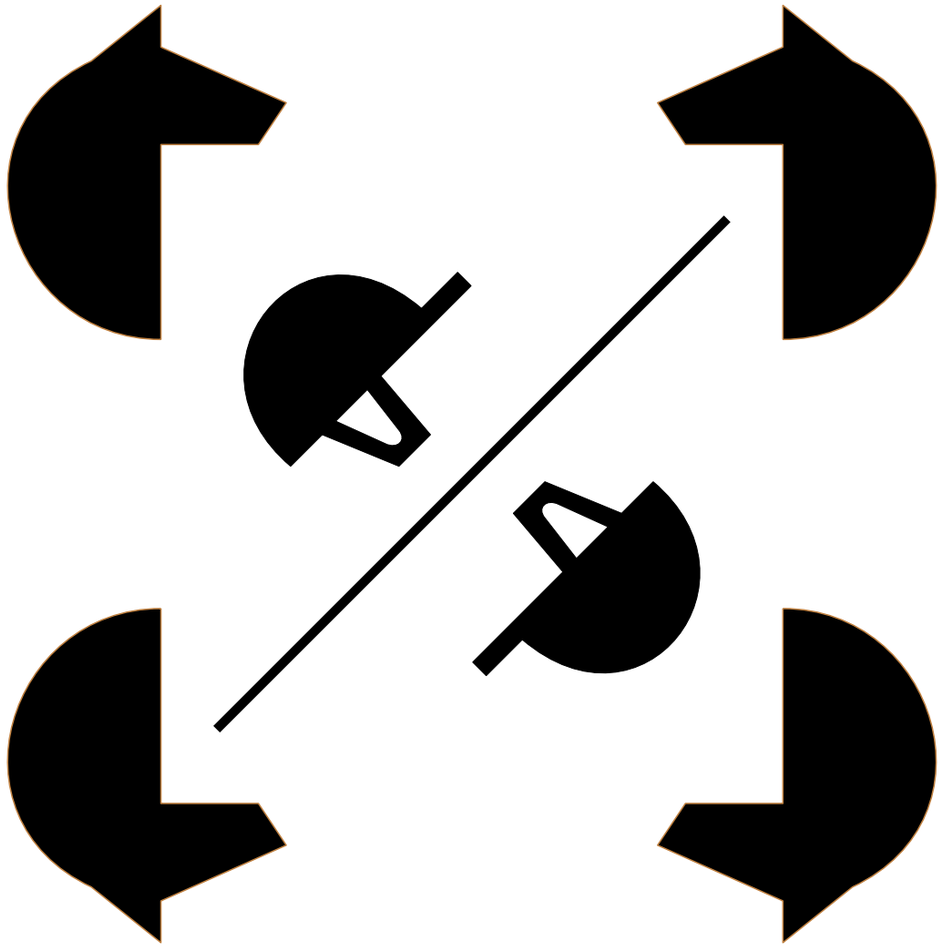
Equestrian Dressage



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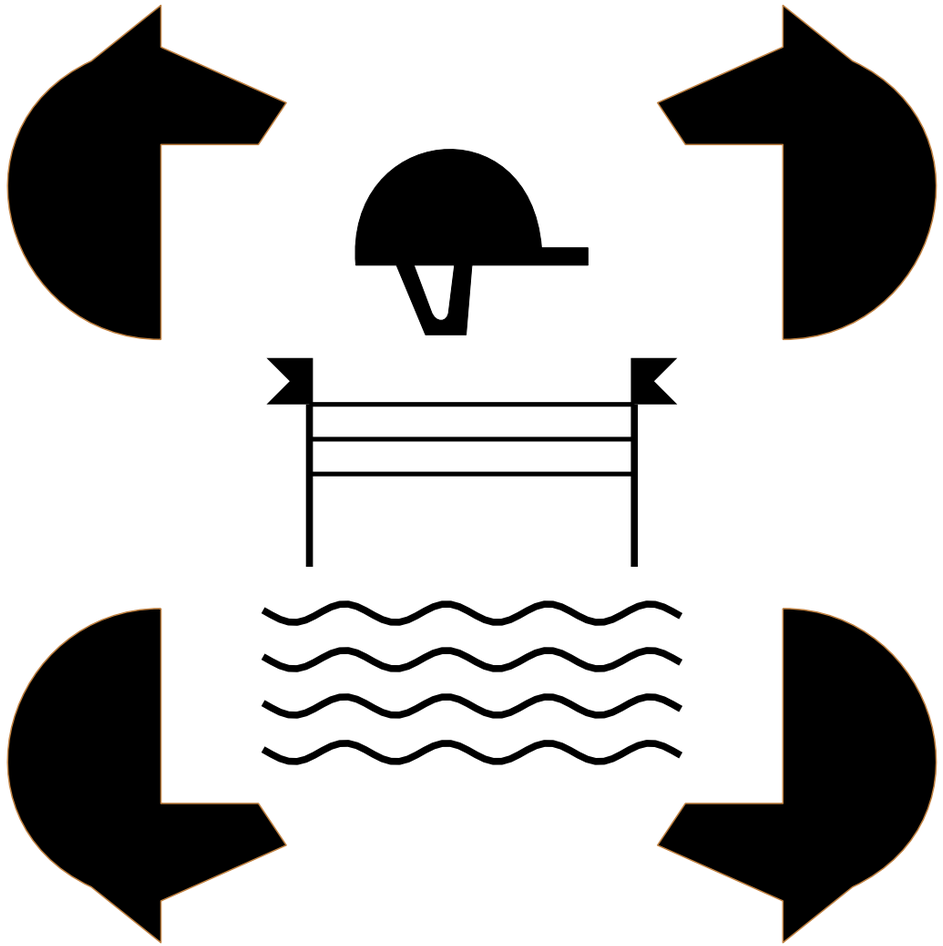
Equestrian Eventing



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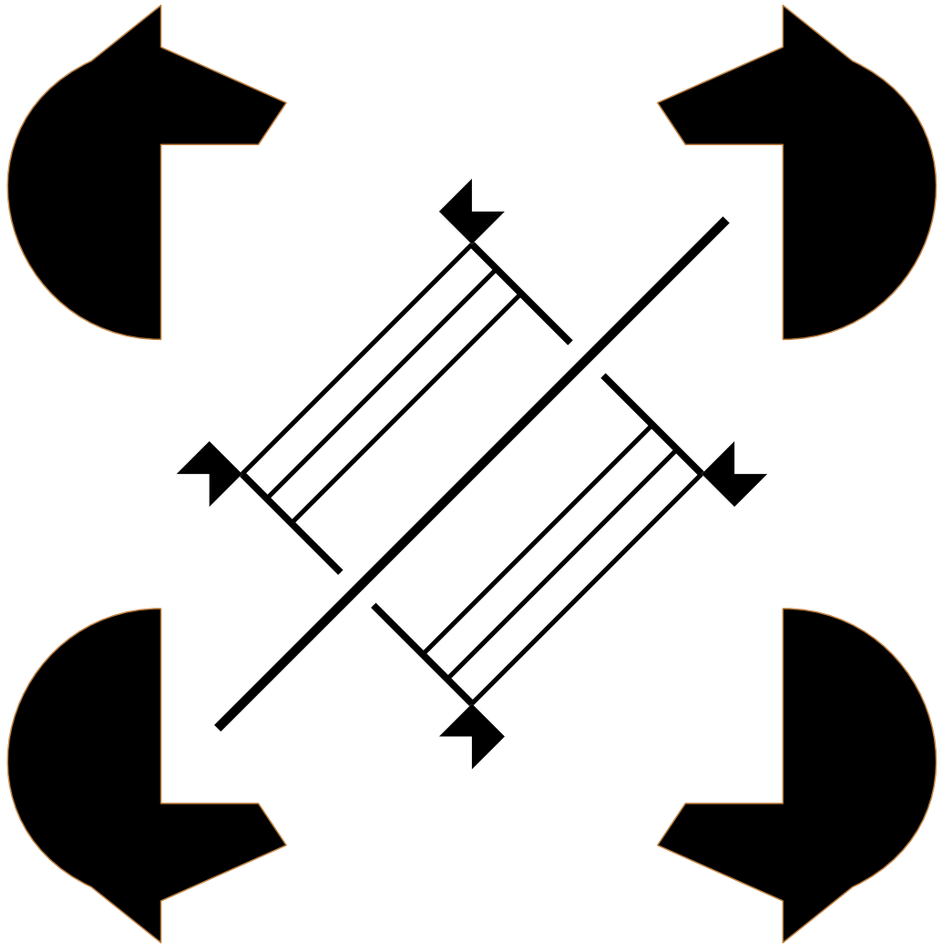
Equestrian Jumping



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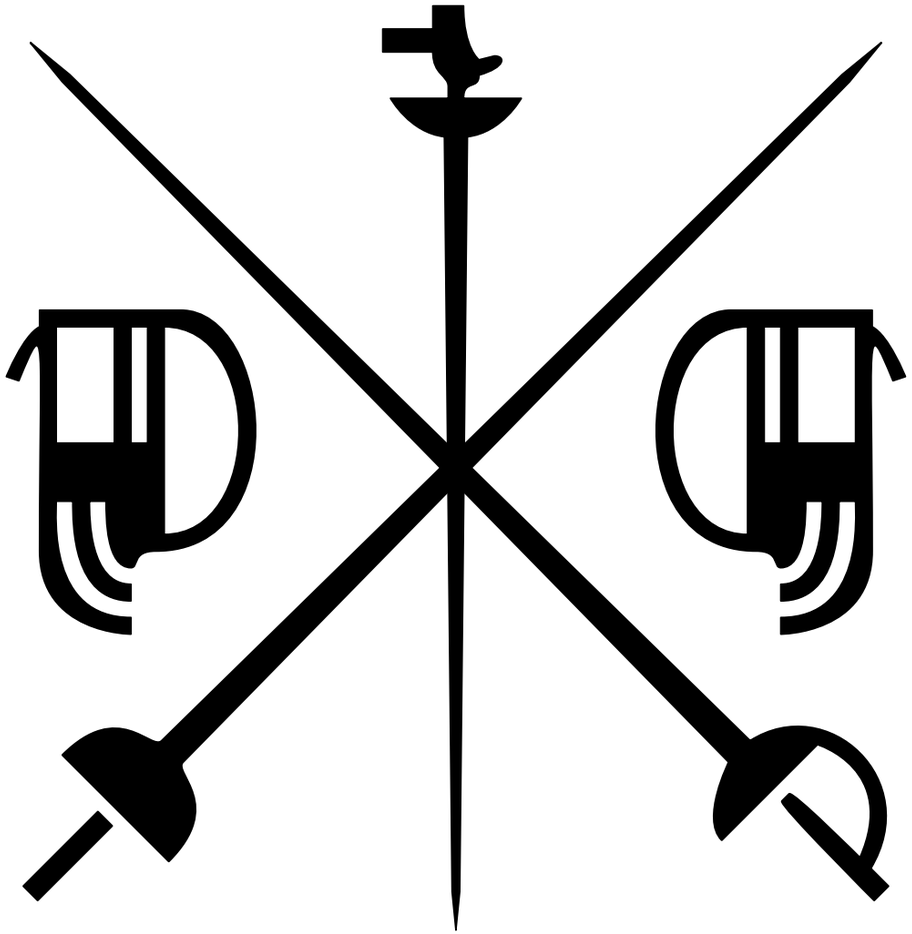
Fencing



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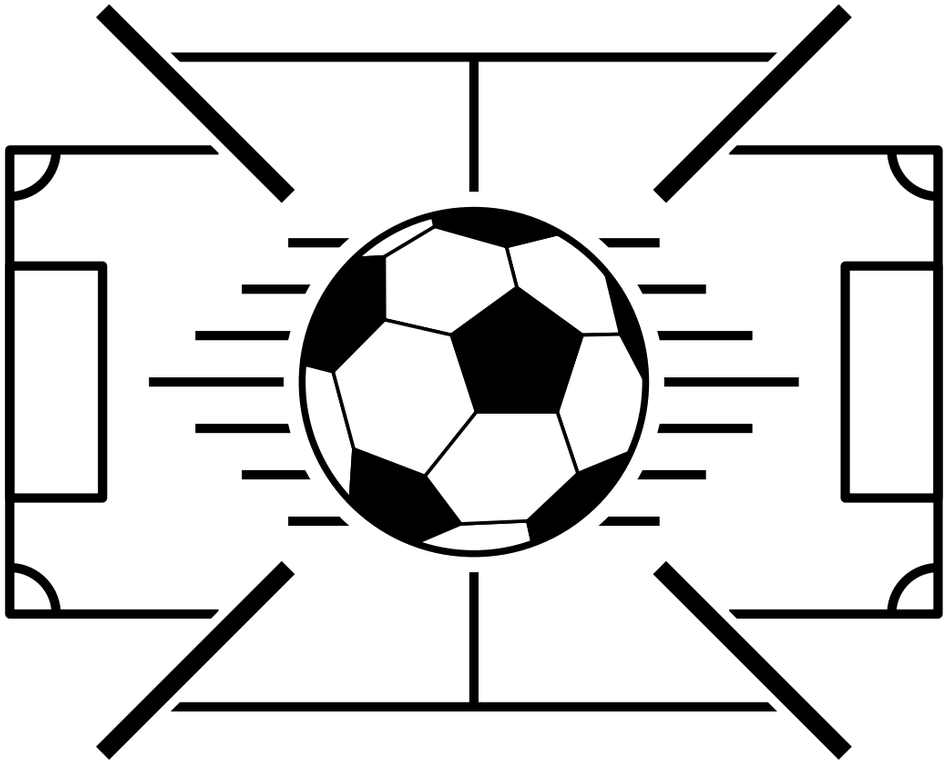
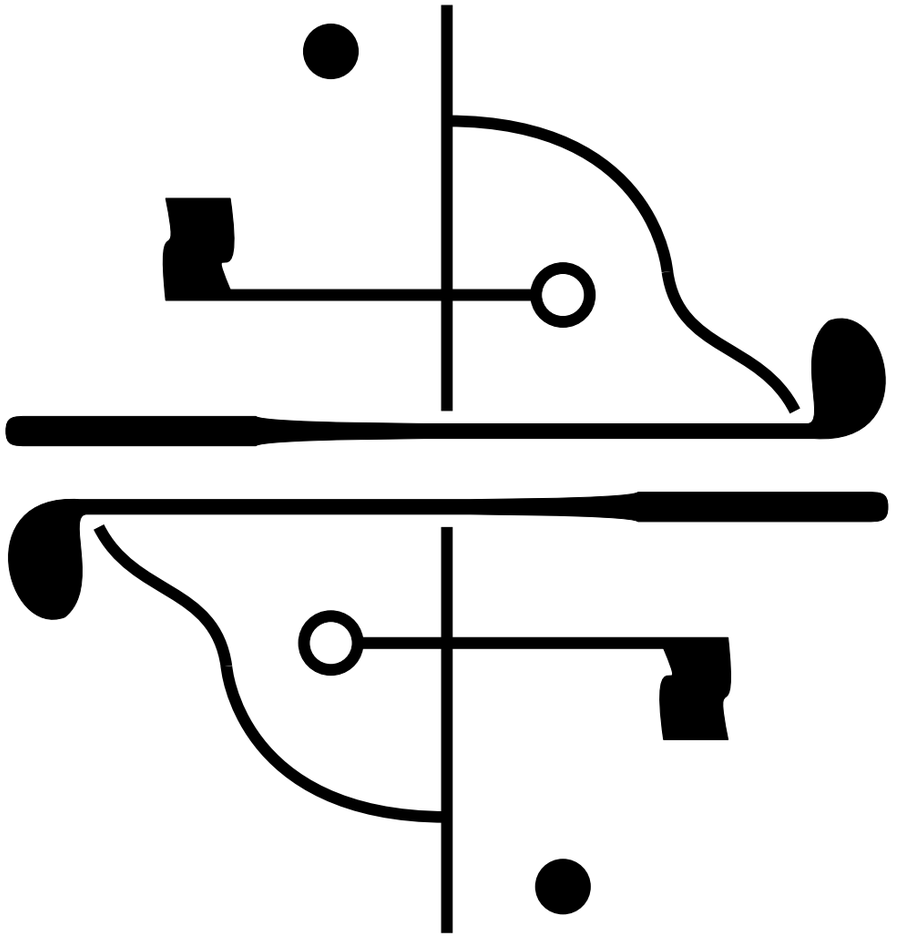
Football



Golf



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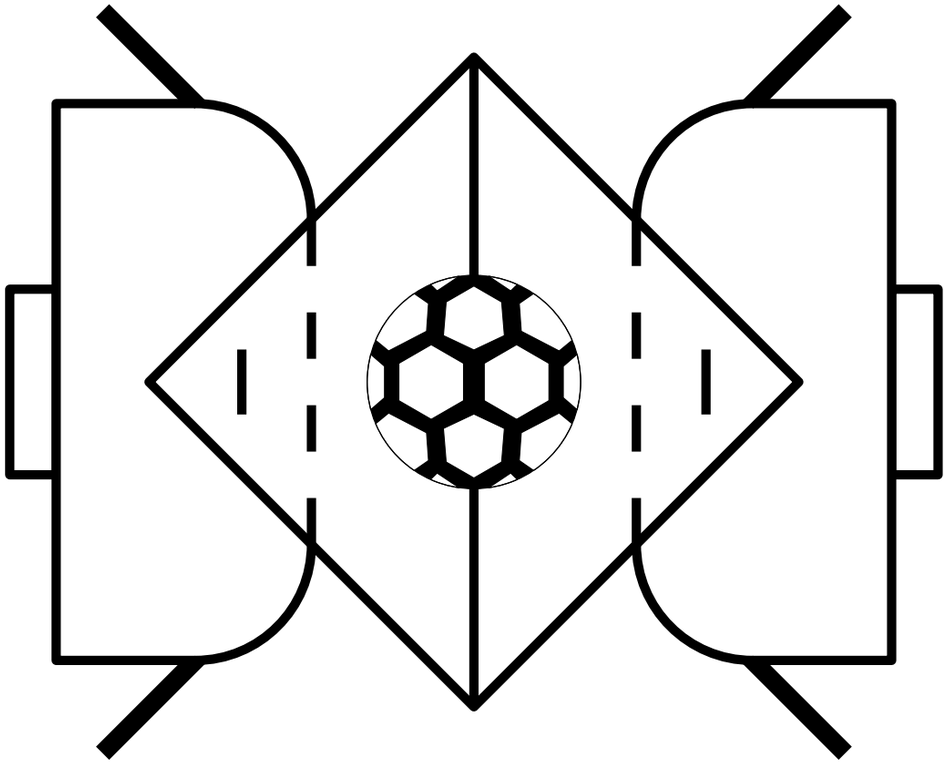
Handball



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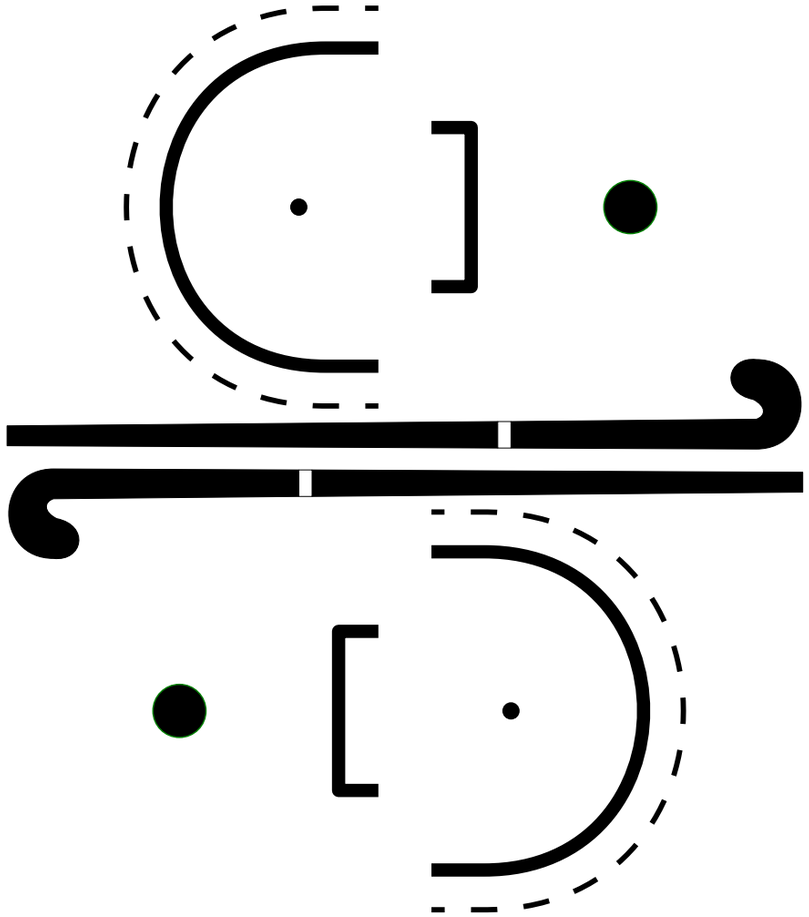
Hockey



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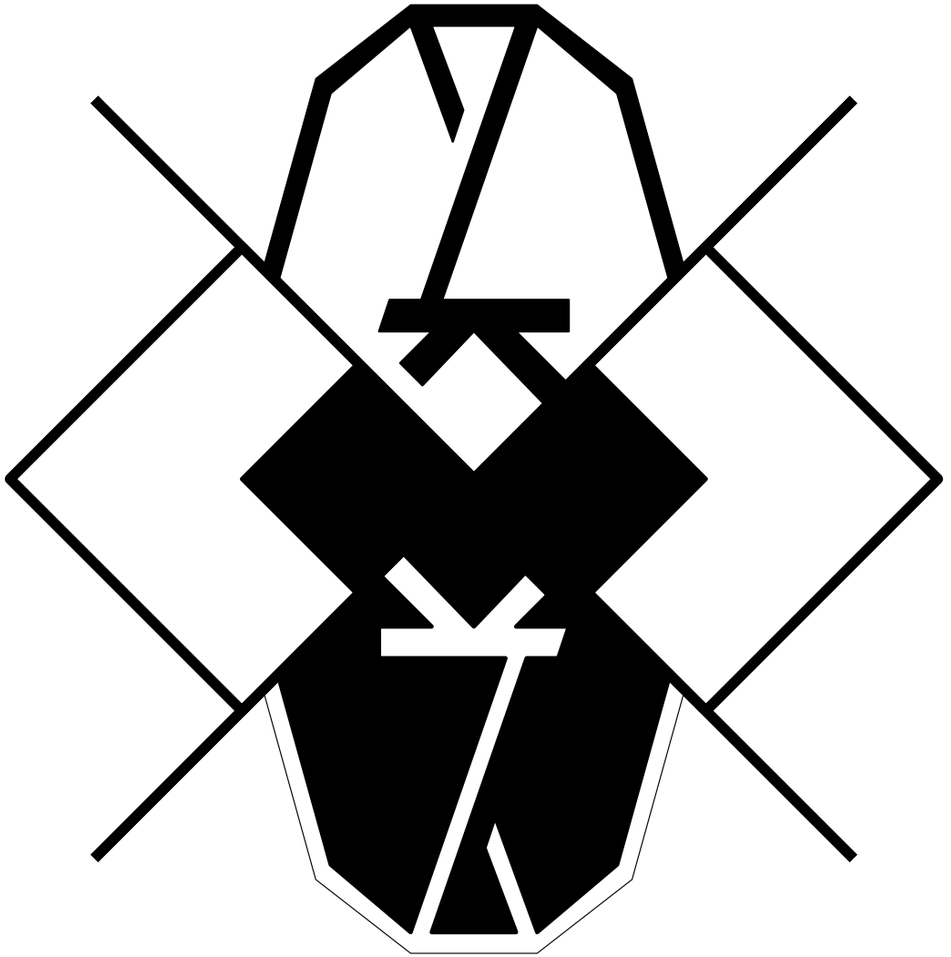
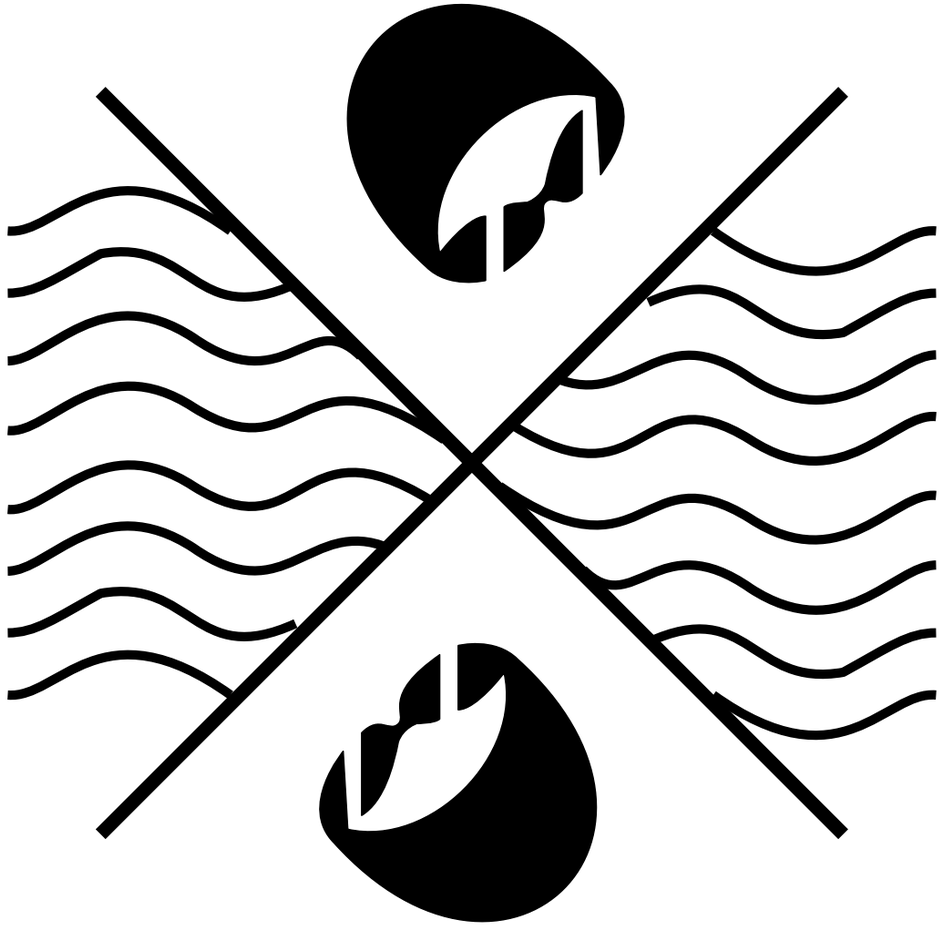
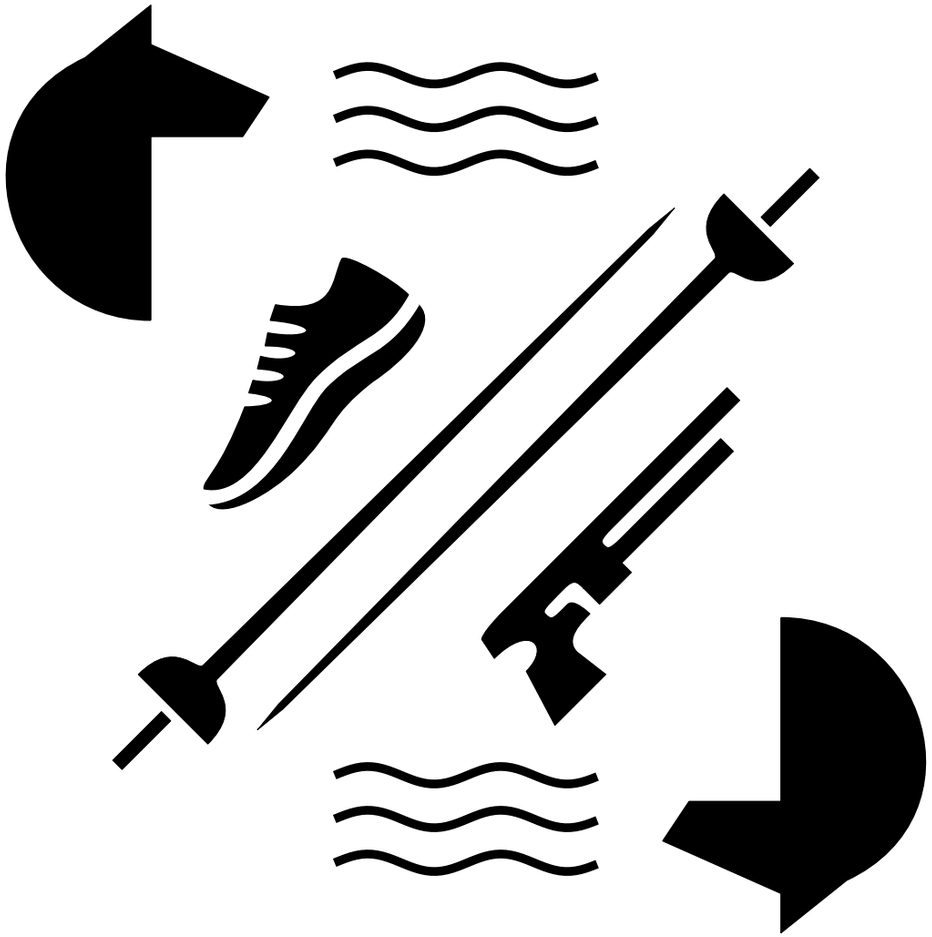
Judo



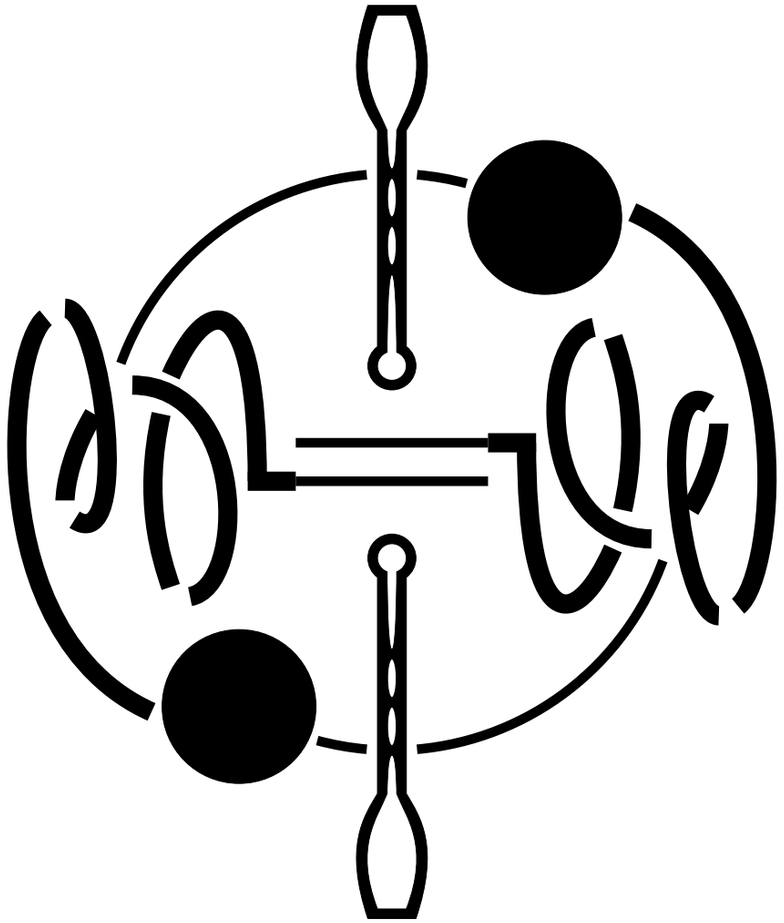
Marathon Swimming



Modern Pentathlon



Rhythmic Gymnastics



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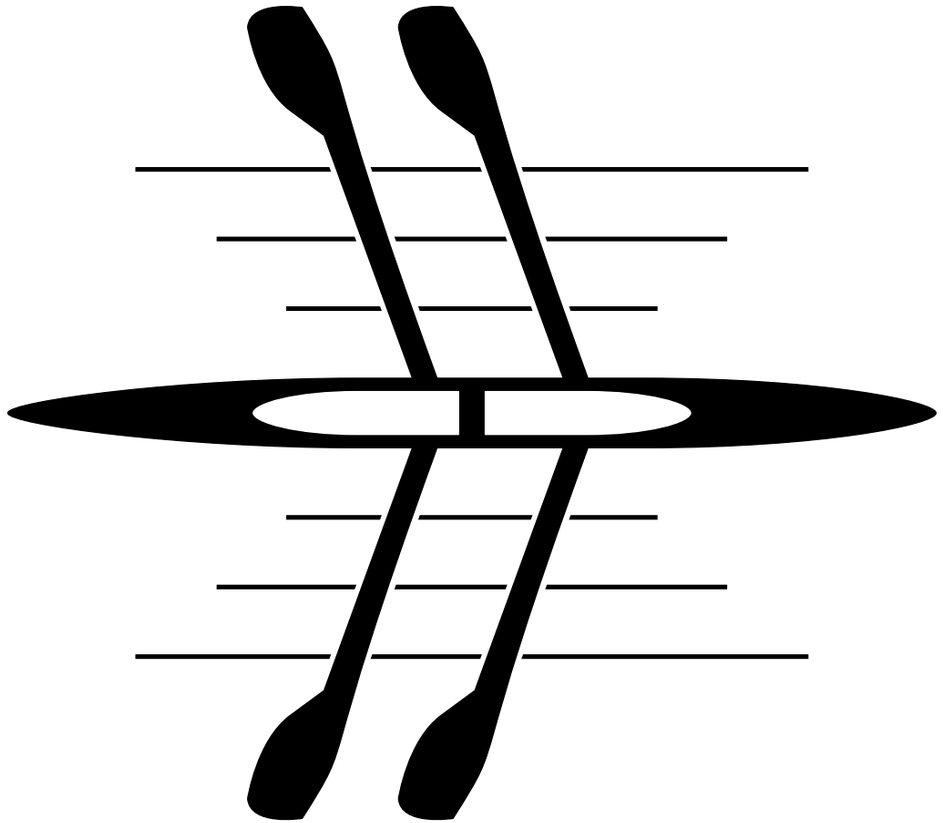
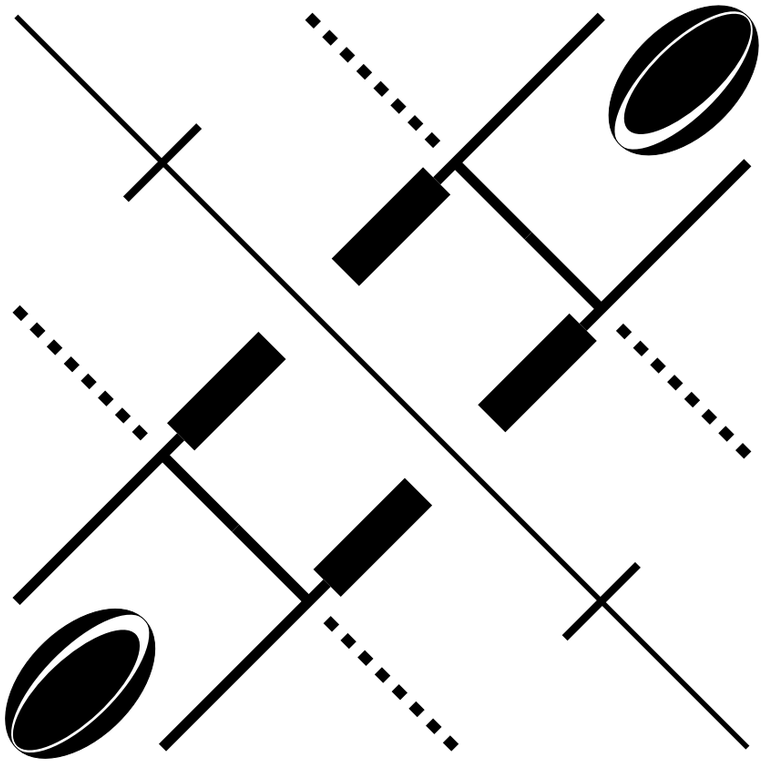
Rowing



Rugby Sevens



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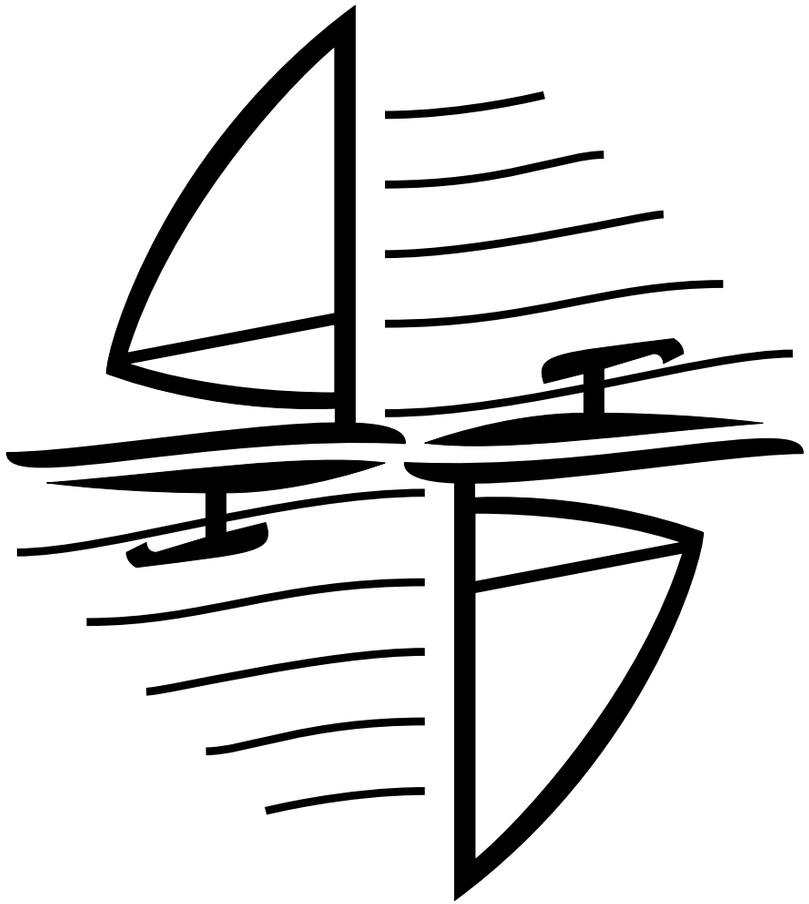
Sailing



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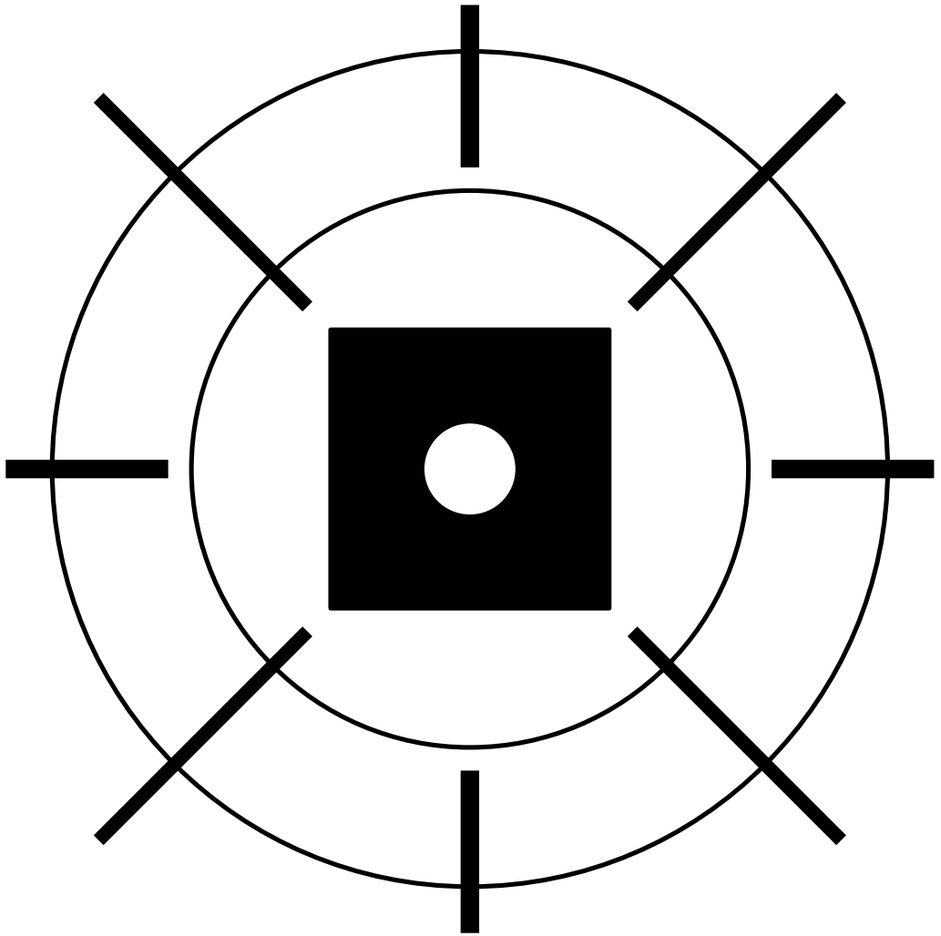
Shooting



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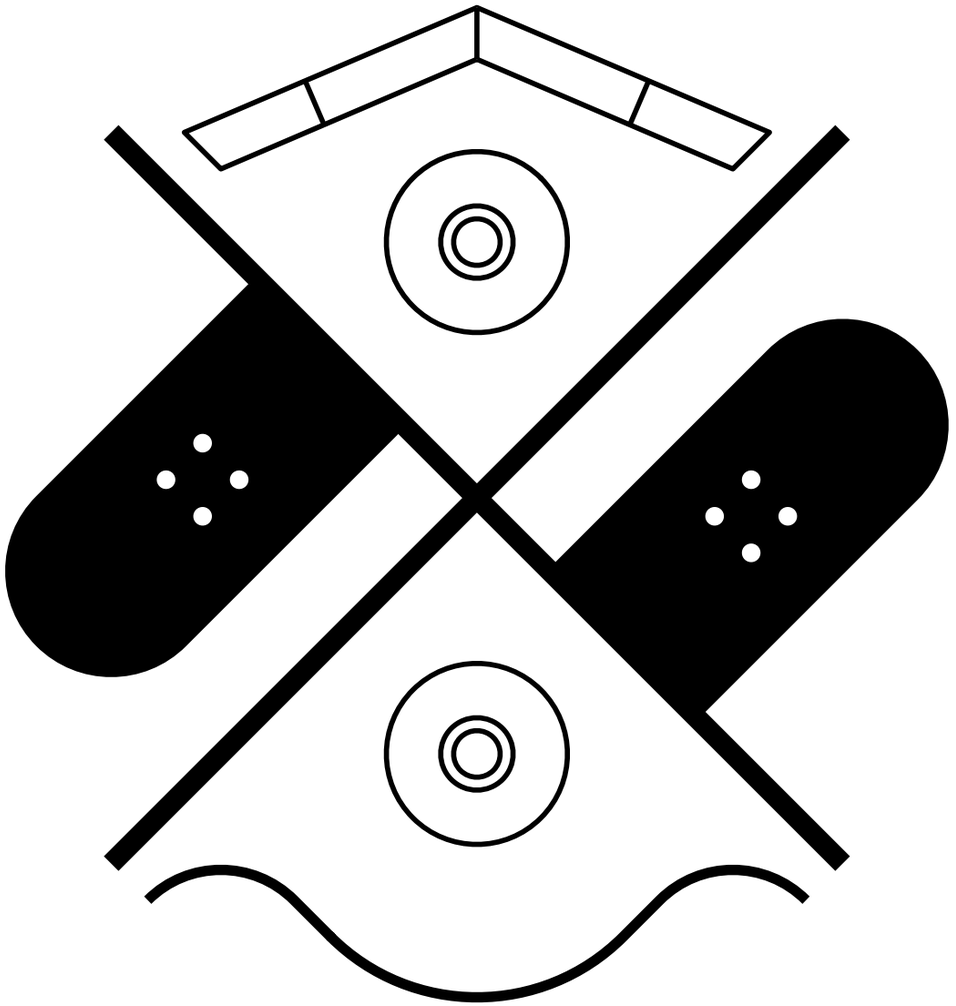
Skateboarding



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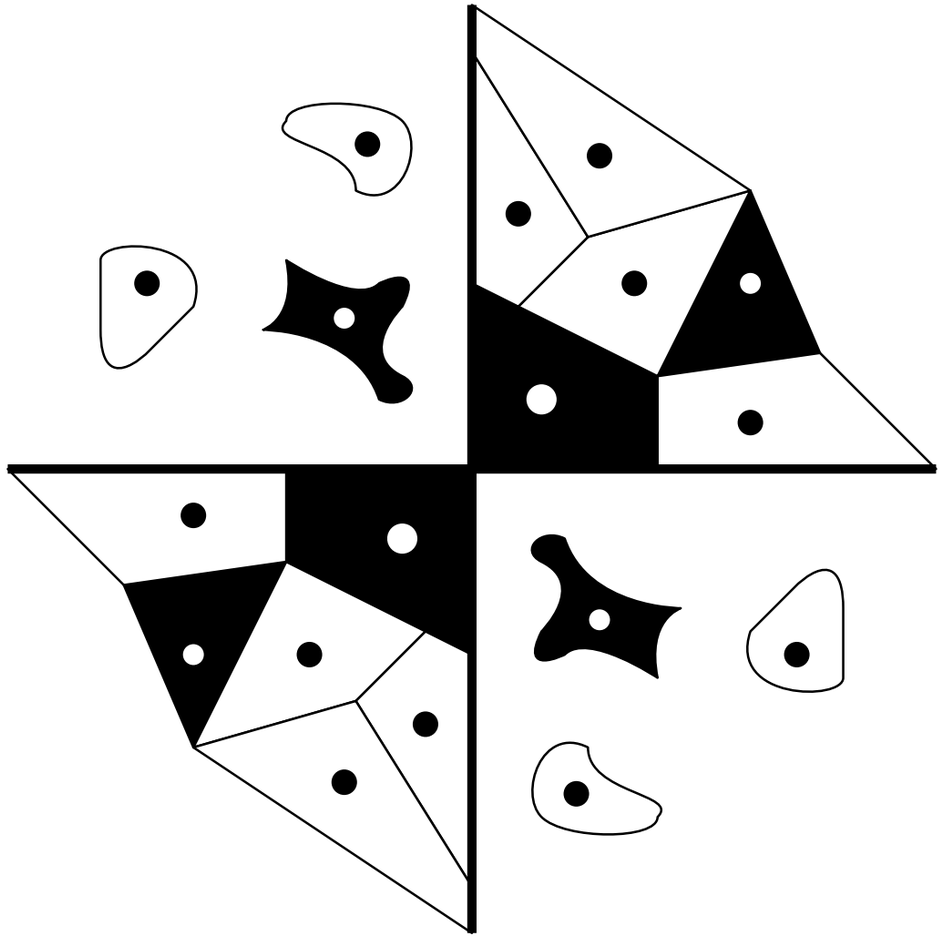
Sport Climbing



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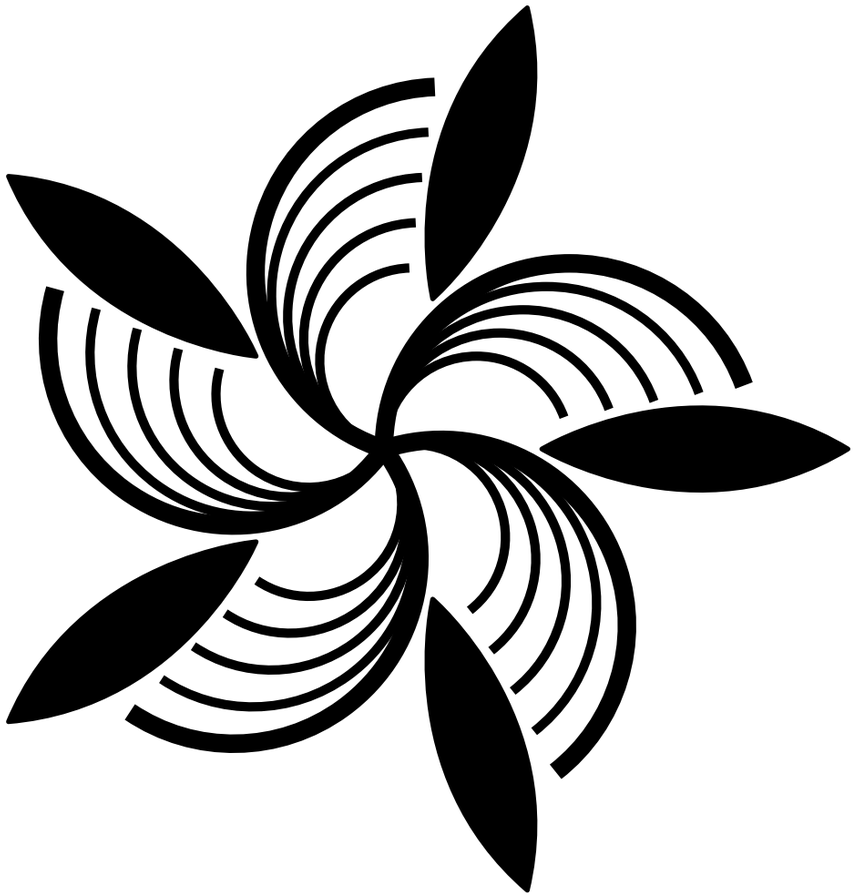
Surfing



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Swimming

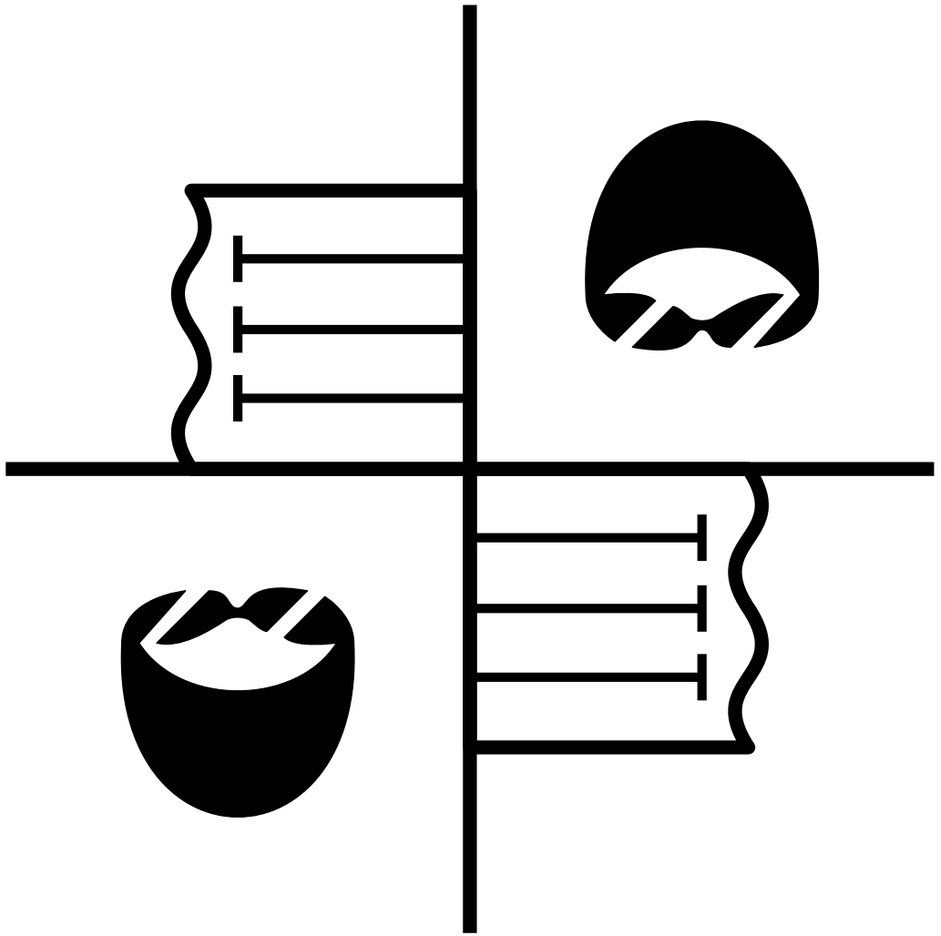

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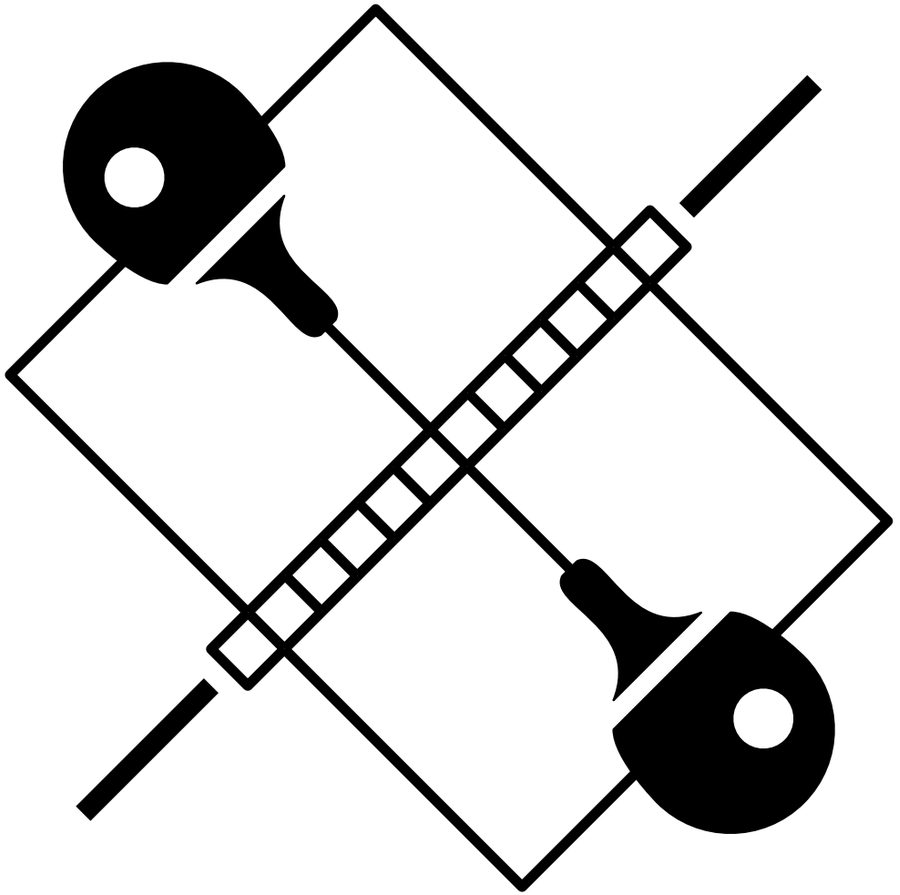
Table Tennis



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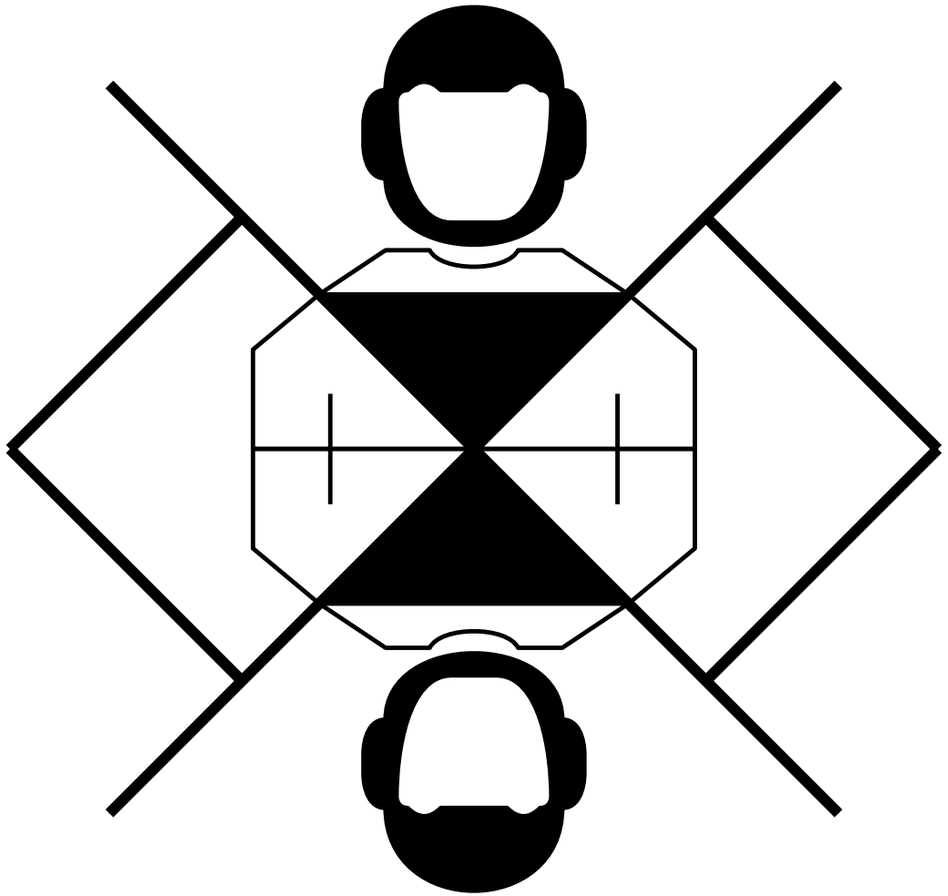
Taekwondo



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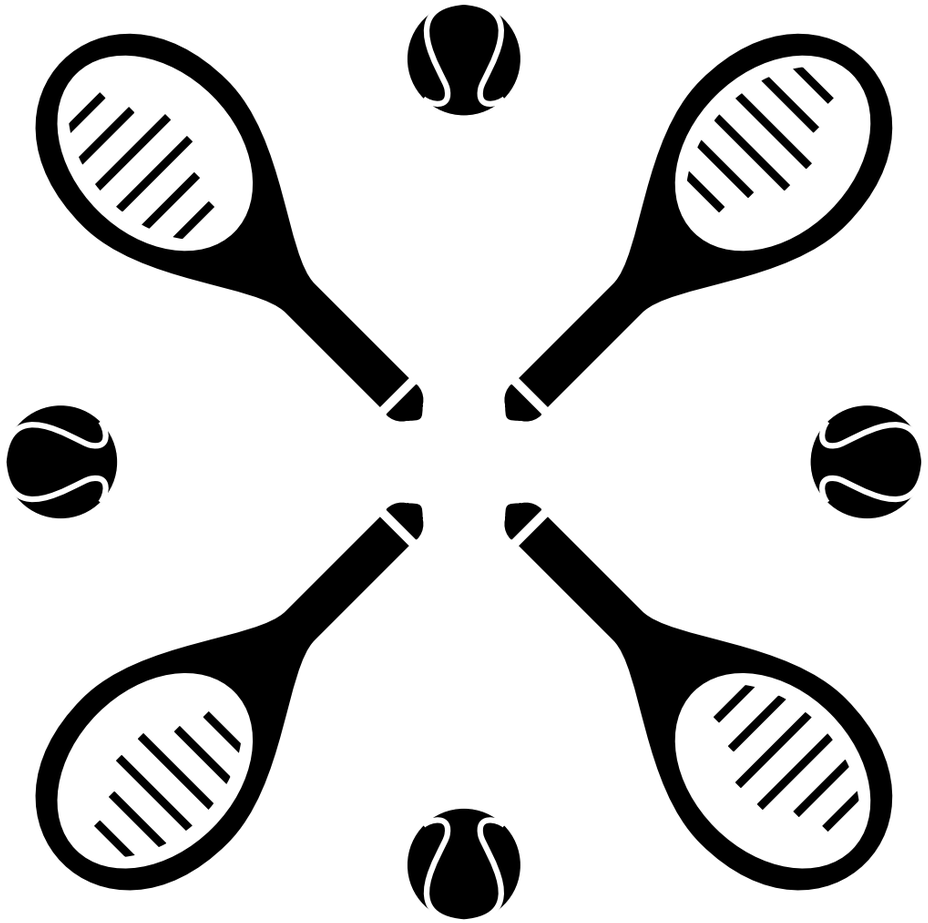
Tennis



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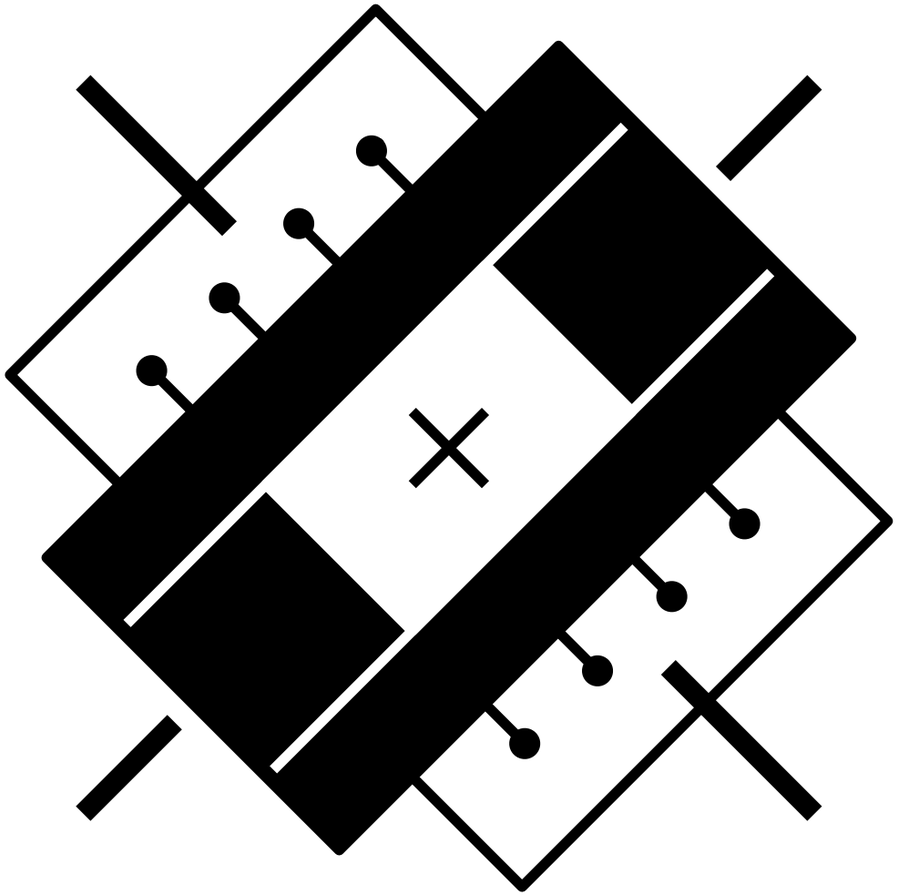
Trampoline



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Triathlon

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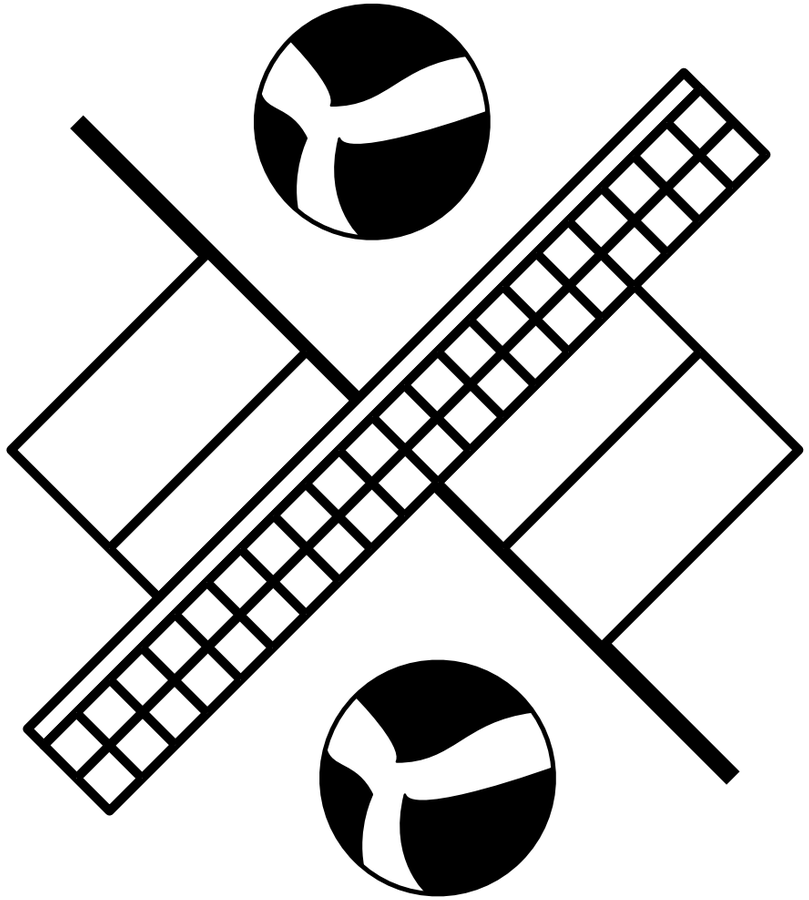
Volleyball



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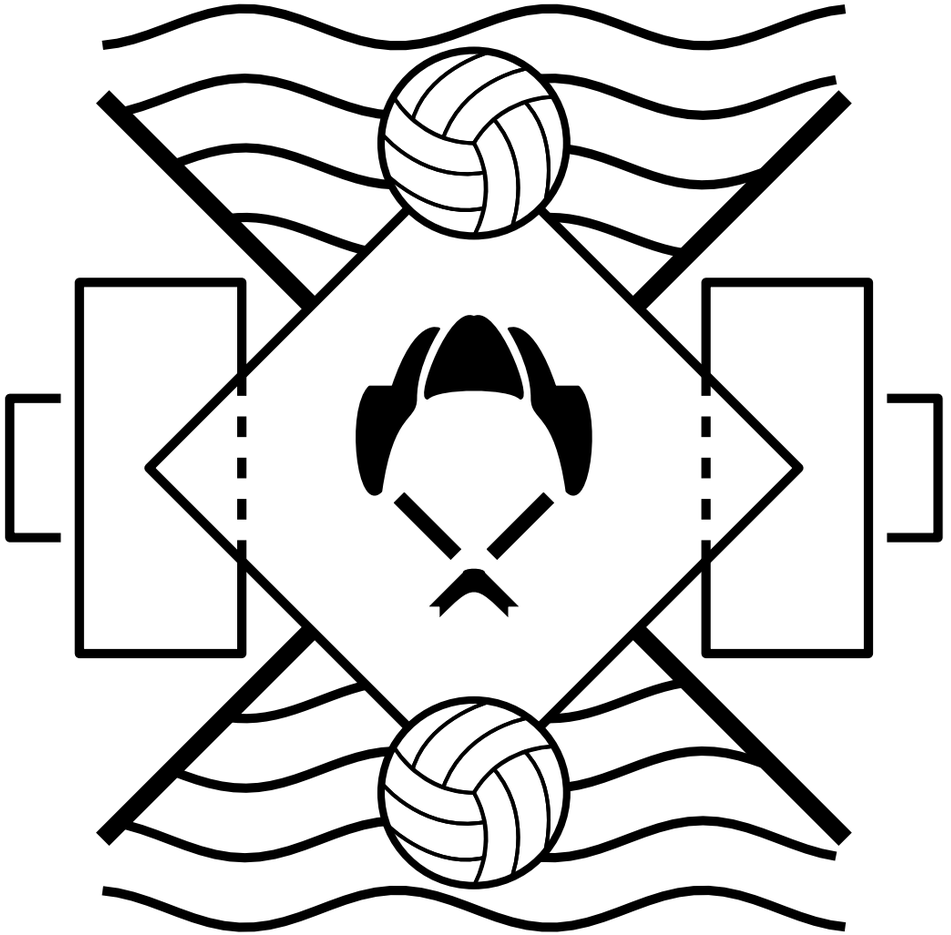
Water Polo



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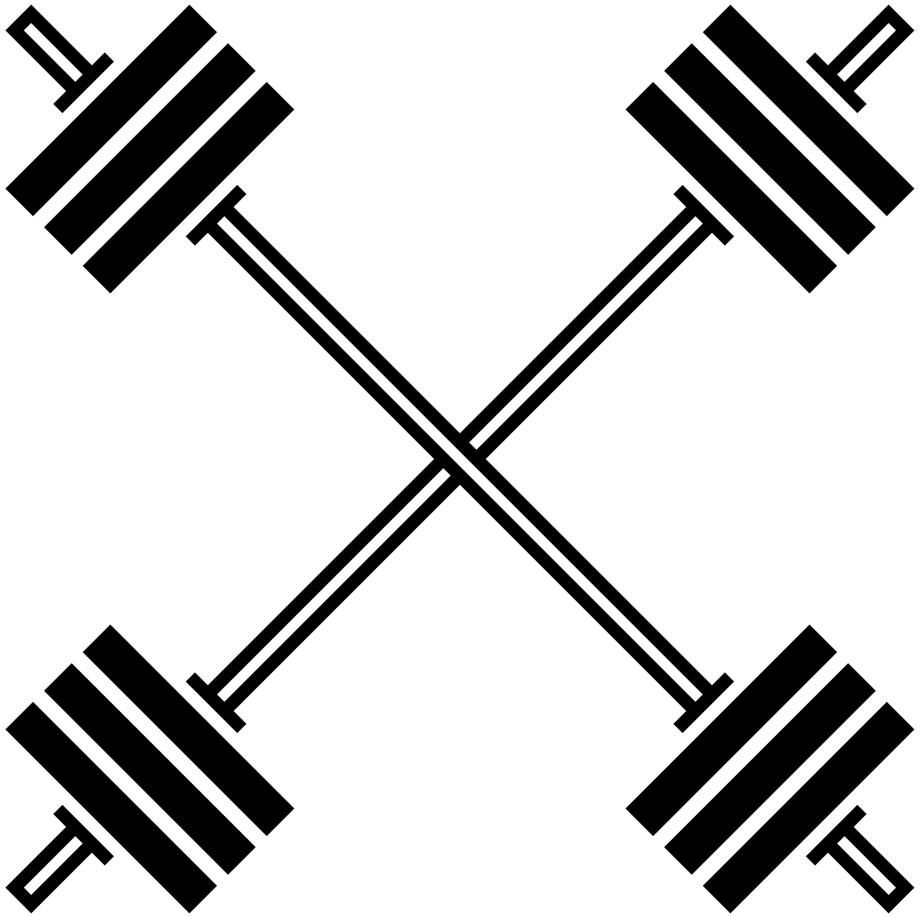
Weightlifting



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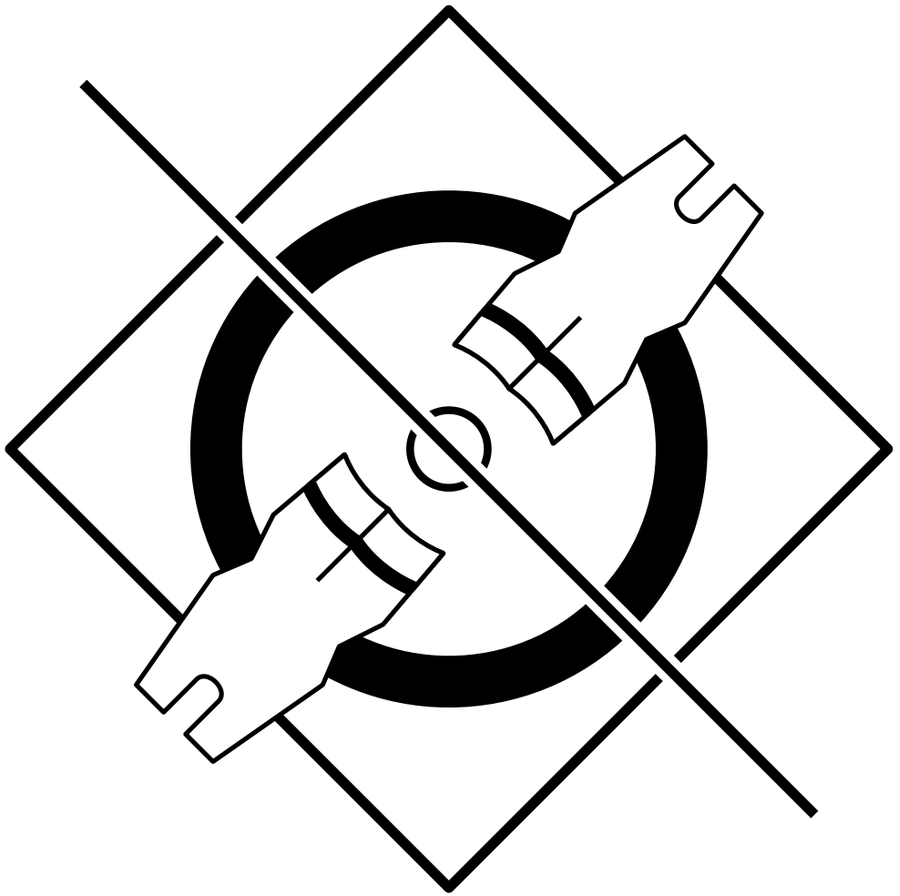
Wrestling



Expected Impacts

- Innovation and Promotion of Mathematics of Art
  - Contribute to art design underpinning an open digital ecosystem that provides the tools and services for research and innovation
  - Contribute to the socioeconomic and technological sustainability, and projecting logical design concepts and values at home and abroad
- Utilisation of Emerging Technologies for Design and Digital Transformations
  - Preserves design ecosystem and diversity with new endeavours and digital initiatives
  - Derives benefit from the digitalisation and bigdata intelligent analytics to contribute to its advancement and promotion
- Positive Impact on Technology Integration and Societal Evolution
  - Foster art, science and technology in social inclusion, increase local and region technological capabilities
  - Increased interest in new technologies, including those applied to art
  - Bridge the gender gap and promote mathematics and computer programming to youth, especially girls.
- Skill Development, Awareness and Capacity Building
  - Provide new skills that are engaging and easy to acquire underpinning an economy generating more employment where high-skilled workforce is needed
  - Empower youth in the new emerging areas of technology innovation with deep roots in art, science and technology.
  - Creation of employment for youth, women and disadvantaged minorities
- Economic and Environmental Impacts
  - Support direct and indirect economic growth with specific focus on digital art and policy directives
  - Assessment of climate impacts including promotion of climate change awareness

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