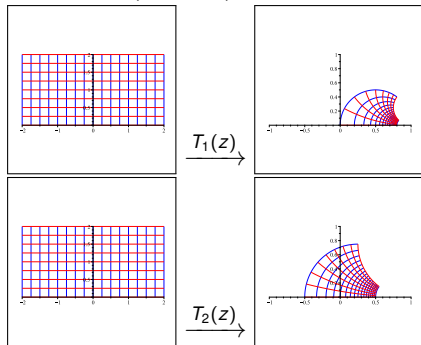


# A PATH TO PROCESS GENERAL MATRIX FIELDS

**Moebius transformations (hyperbolic geometry):**

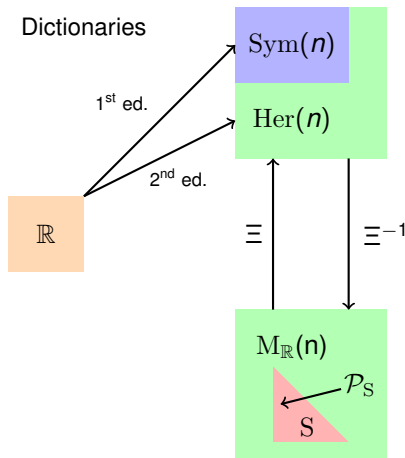
$$T(z) = \frac{az + b}{cz + d}, \quad ad - bc \neq 0$$

$$\longleftrightarrow \mathbf{T} = \begin{pmatrix} a & b \\ c & d \end{pmatrix} \in \text{Gl}_2(\mathbb{R}) \subset \text{M}_{\mathbb{R}}(n)$$



$$\frac{1}{2}\mathbf{T}_1 + \frac{1}{2}\mathbf{T}_2 = ?, \quad \text{psup}(\mathbf{T}_1, \mathbf{T}_2) = ?, \quad \text{pinf}(\mathbf{T}_1, \mathbf{T}_2) = ?$$

**Scientific contribution:**



**Open research question:**

Interesting real-world application?