

Possible Choices of Complex Co-ordinates for a Surface

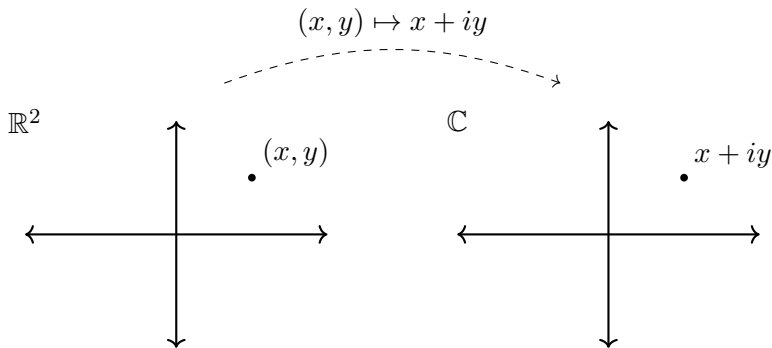
Moduli Spaces of Riemann Surfaces

Zhaoshen Zhai

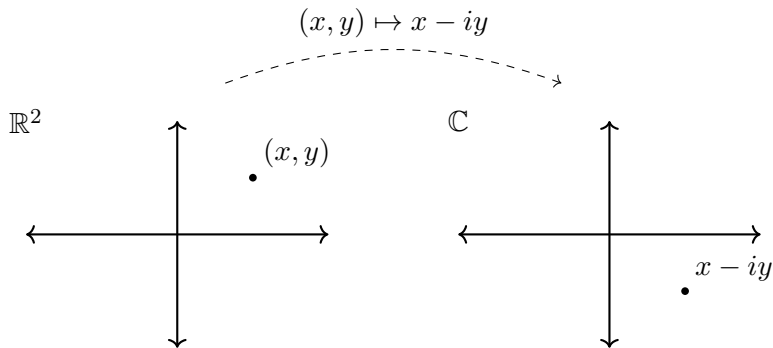
McGill University

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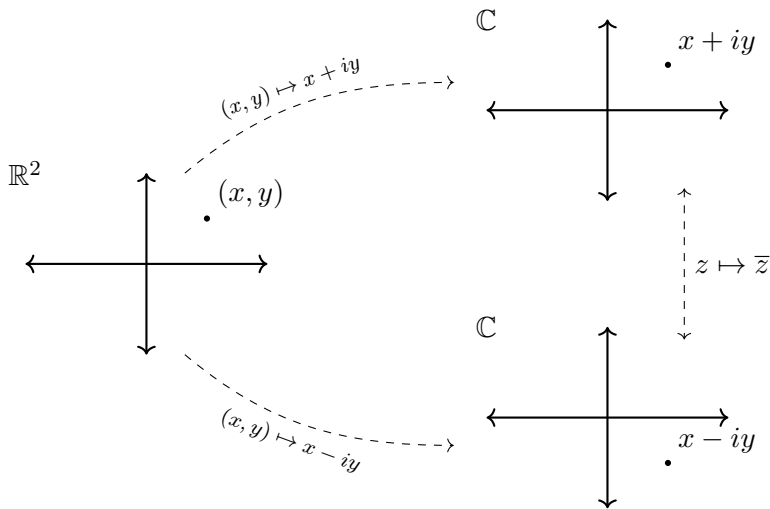
How many complex coordinates on \mathbb{R}^2 ?



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Refined question

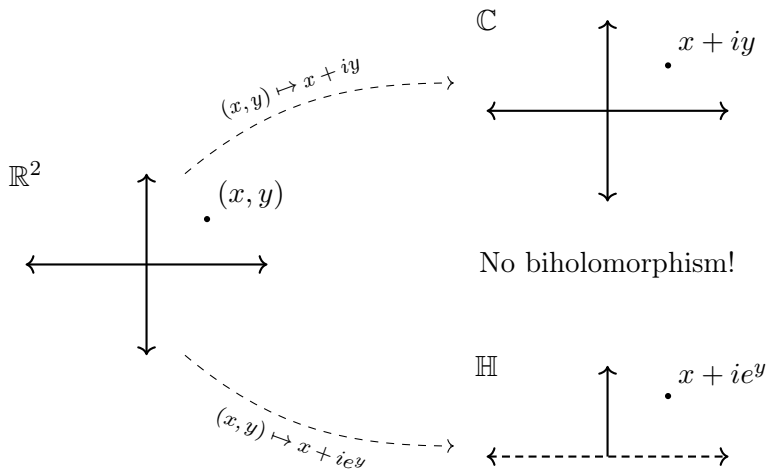
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Refined question

~~How many complex coordinates on \mathbb{R}^2 ?~~

How many complex coordinates on \mathbb{R}^2 *up to biholomorphism*?

\mathbb{C} and \mathbb{H}

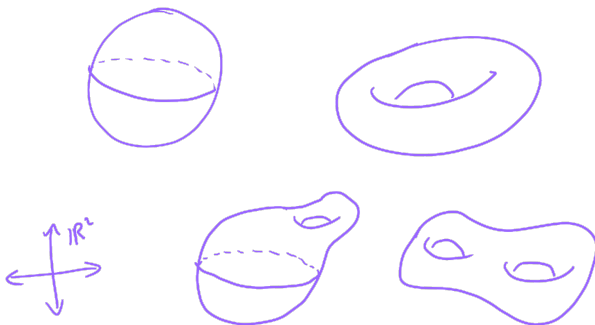


Riemann surfaces

What about for manifolds?

Definition

A *Riemann surface* is a connected 1-dimensional complex manifold.



Compact Riemann surfaces

Theorem (Classification)

Every compact Riemann surface is classified by its genus.