

MTO 21.3 Examples: Amiot and Baroin, Old and New Isometries between Pc sets in the Planet-4D Model

(Note: audio, video, and other interactive examples are only available online)
<http://www.mtosmt.org/issues/mto.15.21.3/mto.15.21.3.amiot-baroin.php>

Figure 1. Product $\mathbf{Z}_3 \times \mathbf{Z}_4$ as seen in $\mathbf{C} \times \mathbf{C}$

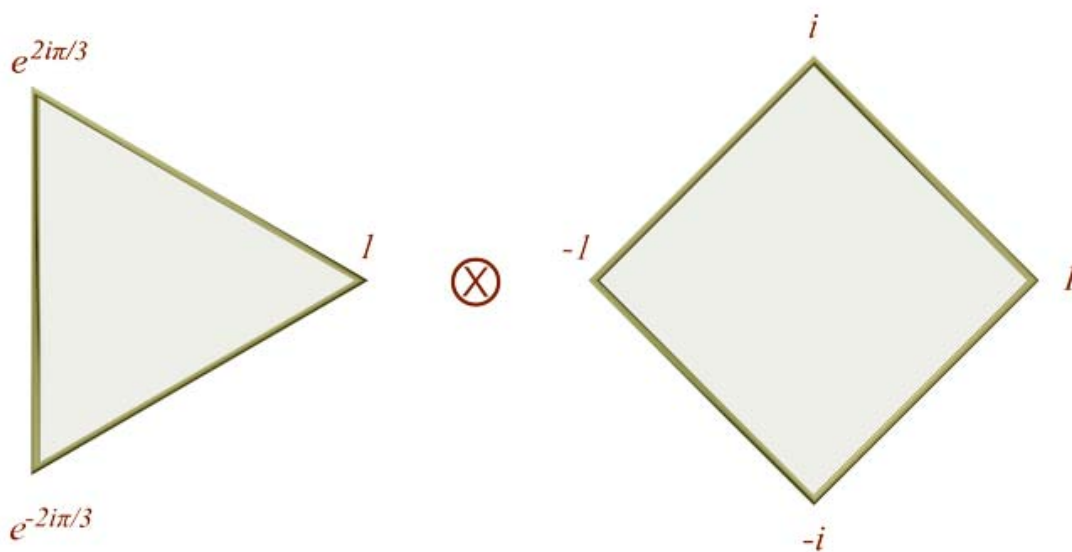


Figure 2. Embedding the torus of thirds in \mathbf{R}^3

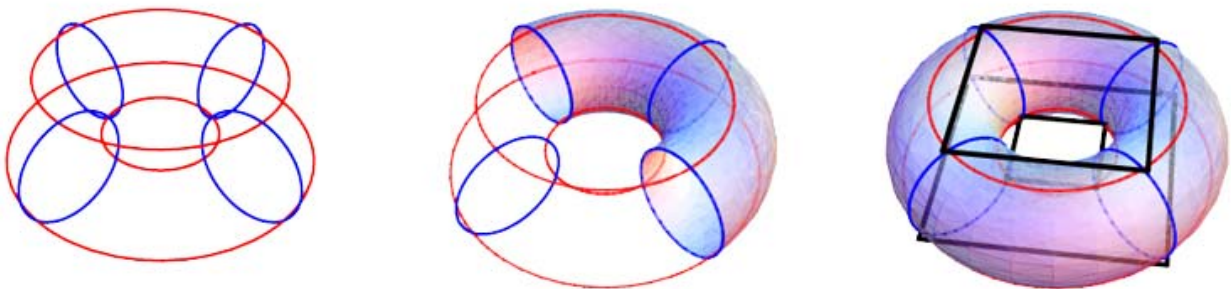


Figure 3. Projection of the barycenter of a trichord on the surface of the sphere

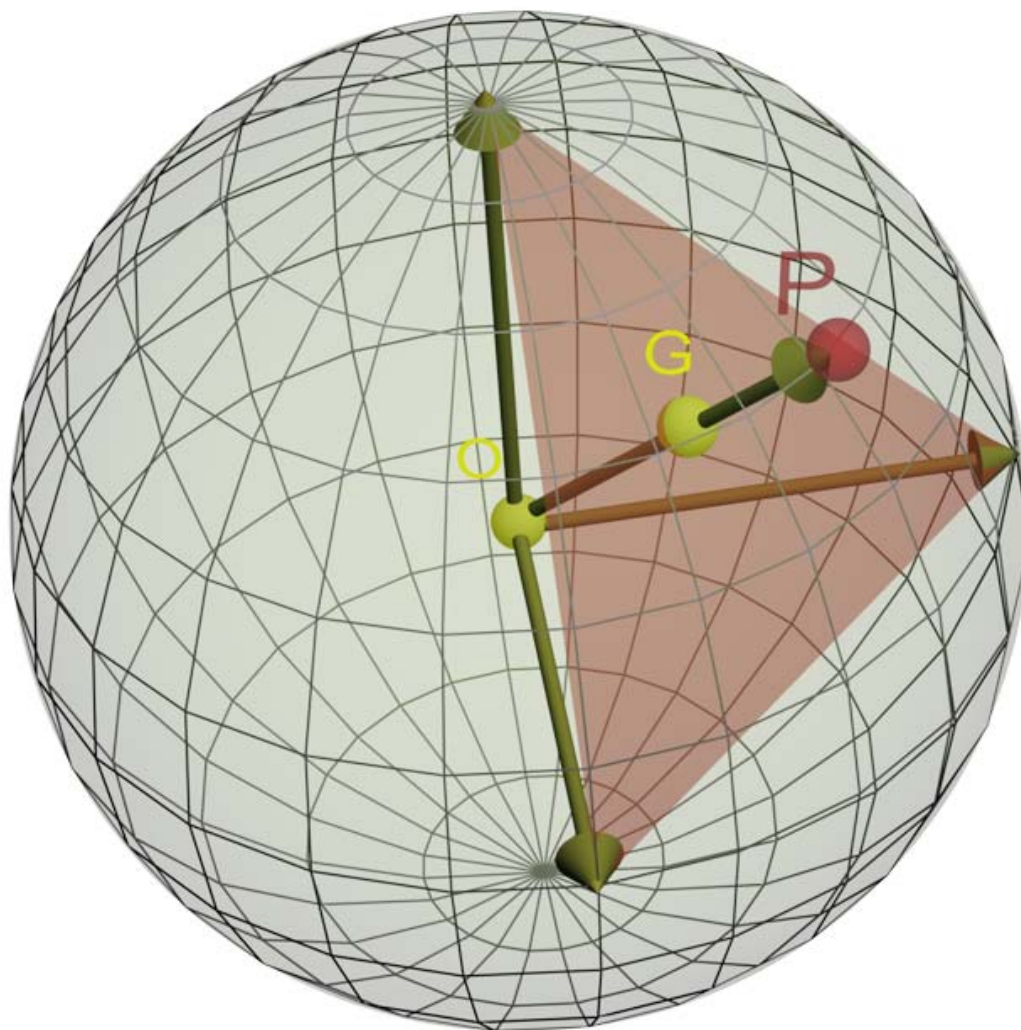


Figure 4. Projection of the barycenter of a trichord on the surface of the sphere (animated)

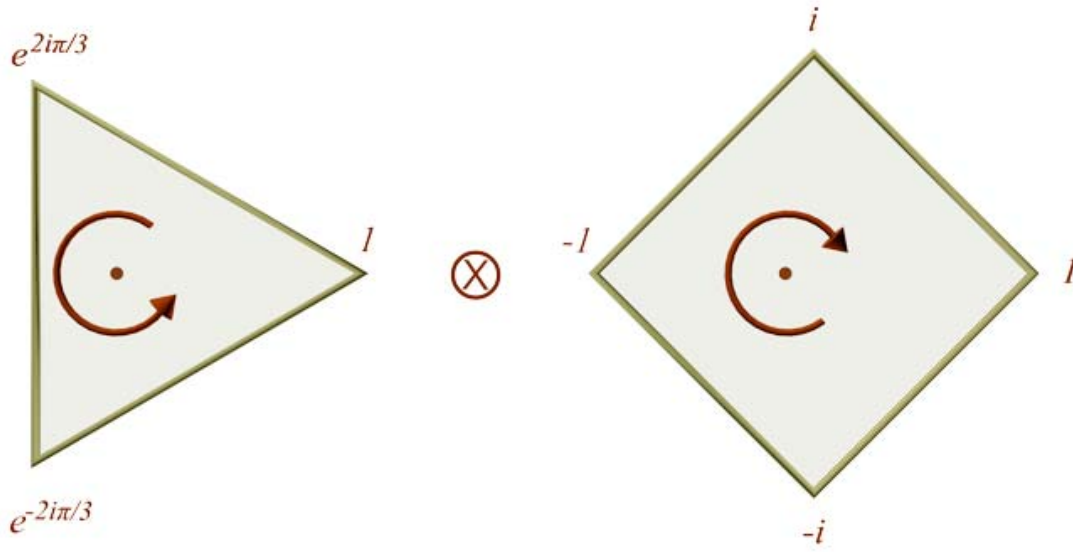


Figure 5. Product of axial symmetries

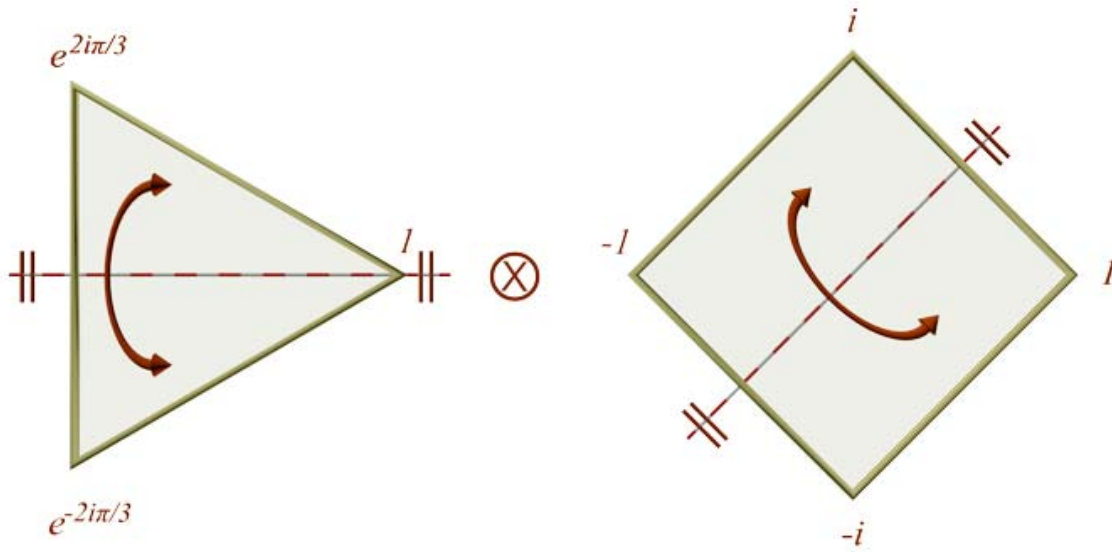


Figure 6. Rotation times axial symmetry

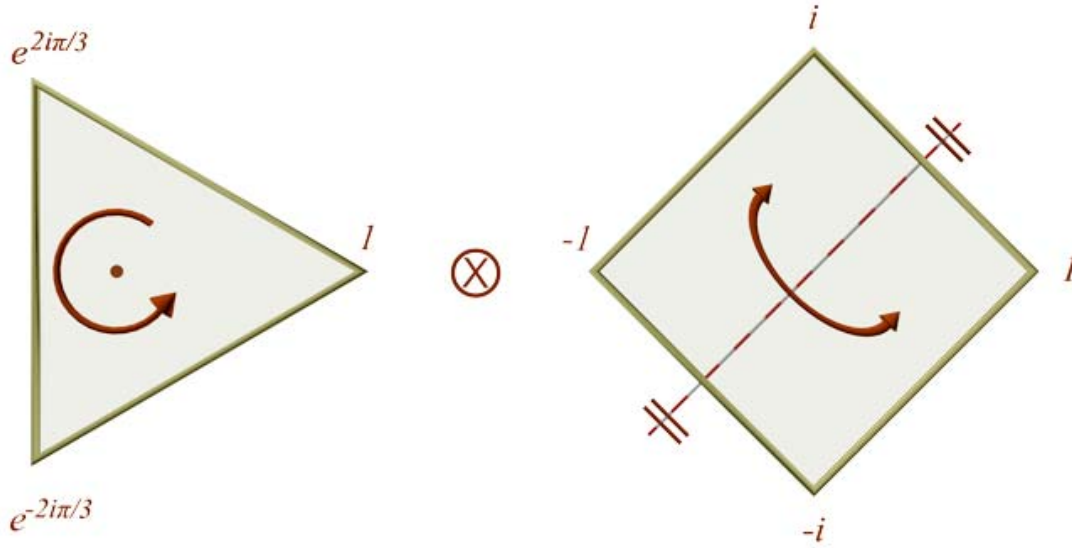


Figure 7. Distances between pcs on the Planet-4D model

	$(1, 1)$	$(1, i)$	$(1, -1)$	$(1, -i)$	$(e^{2i\pi/3}, 1)$	$(e^{2i\pi/3}, i)$	$(e^{2i\pi/3}, -1)$	$(e^{2i\pi/3}, -i)$	$(e^{-2i\pi/3}, 1)$	$(e^{-2i\pi/3}, i)$	$(e^{-2i\pi/3}, -1)$	$(e^{-2i\pi/3}, -i)$
$(1, 1)$	0	$\sqrt{2}$	2	$\sqrt{2}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$
$(1, i)$	$\sqrt{2}$	0	$\sqrt{2}$	2	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$
$(1, -1)$	2	$\sqrt{2}$	0	$\sqrt{2}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$
$(1, -i)$	$\sqrt{2}$	2	$\sqrt{2}$	0	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$
$(e^{2i\pi/3}, 1)$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	0	$\sqrt{2}$	2	$\sqrt{2}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$
$(e^{2i\pi/3}, i)$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{2}$	0	$\sqrt{2}$	2	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$
$(e^{2i\pi/3}, -1)$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	2	$\sqrt{2}$	0	$\sqrt{2}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$
$(e^{2i\pi/3}, -i)$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{2}$	2	$\sqrt{2}$	0	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$
$(e^{-2i\pi/3}, 1)$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	0	$\sqrt{2}$	2	$\sqrt{2}$
$(e^{-2i\pi/3}, i)$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{2}$	0	$\sqrt{2}$	2
$(e^{-2i\pi/3}, -1)$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	2	$\sqrt{2}$	0	$\sqrt{2}$
$(e^{-2i\pi/3}, -i)$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{7}$	$\sqrt{5}$	$\sqrt{3}$	$\sqrt{2}$	2	$\sqrt{2}$	0