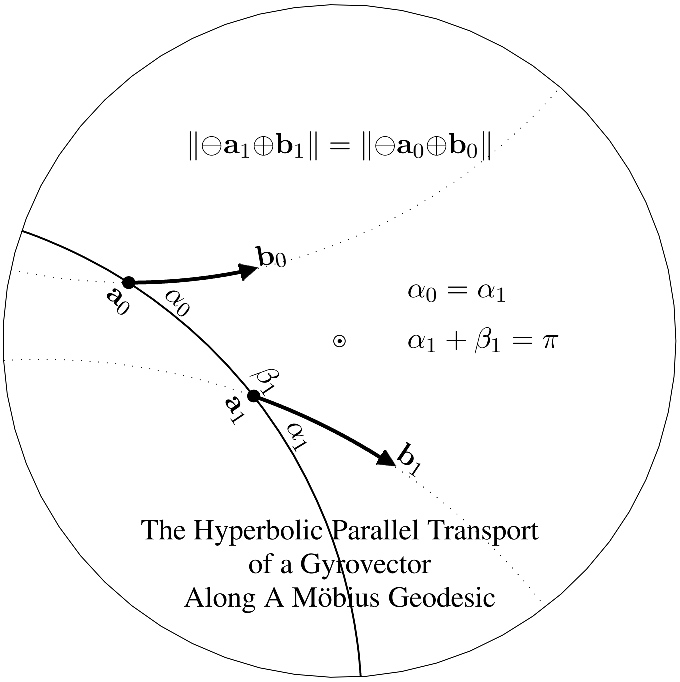

Figure 0.1. The Poincaré n-dimensional ball model of hyperbolic geometry turns out to be the Möbius gyrovector space. In gyro-formalism the nonassociative algebra of the hyperbolic parallel transport of a geodesic segment $(\mathbf{a}_0, \mathbf{b}_0)$ to the geodesic segment $(\mathbf{a}_1, \mathbf{b}_1)$ along the Möbius geodesic that links $\mathbf{a}_0$ and $\mathbf{a}_1$ in a Möbius gyrovector space $(\mathbb{B}, \oplus, \otimes)$ is fully analogous to the algebra of its Euclidean counterpart [19]. The special case when $\mathbb{B} = \mathbb{D}$ is shown here graphically.