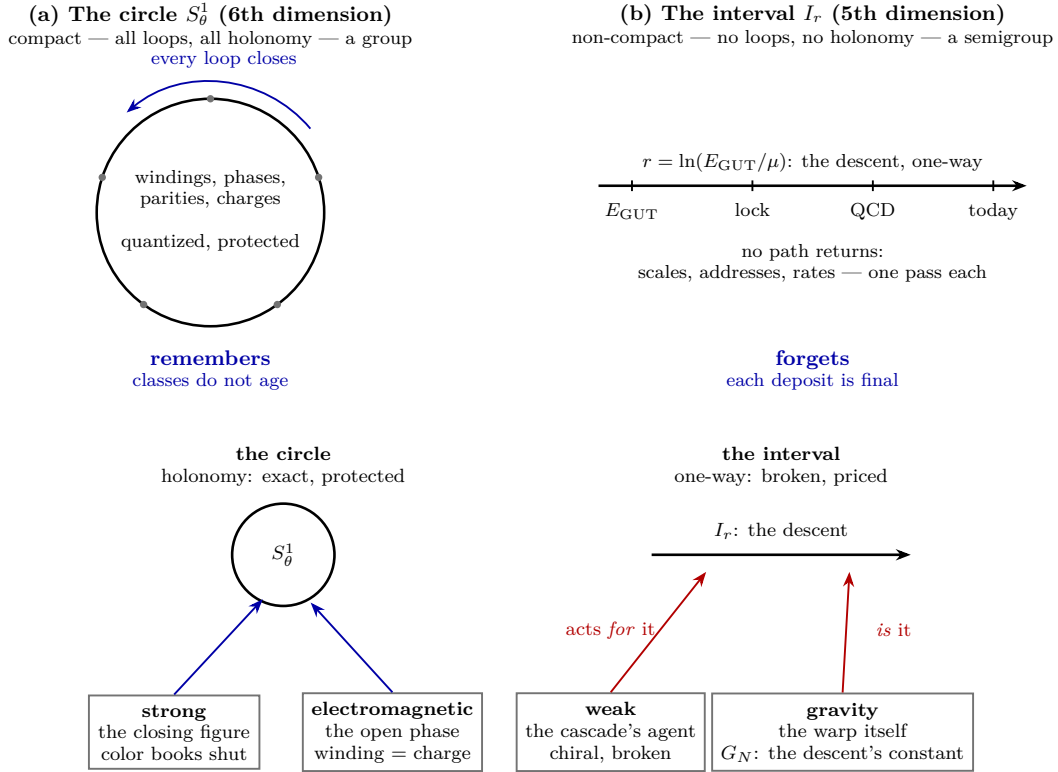


The Circle Remembers; the Interval Forgets — and That One Sentence Sorts All Sixteen



The whole paper in two pictures. Above: the anatomy. Every point of ordinary space carries two further directions, and they are of opposite kind. On the compact circle every path closes, so everything a connection does there is holonomy — quantized, gauge-protected, reversible, a group. On the open interval no path closes, so nothing there can be protected: transport composes forward only, a semigroup, and each step is final. That is the sentence, and it is elementary: *a holonomy requires closed loops, and an interval has none*. Below: the same sentence sorting the four interactions, which is the widest thing it does. Strong and electromagnetic are circle-side, and that is why their charges are exact and unbroken. The weak force is the interval's agent, which is why it alone is chiral, broken and mass-giving. Gravity is not a force on the stage at all but the stage's warp along the descent — why its constant alone is tied to irreversibility, and why it will not quantize like the other three. The century-old puzzle of the four interactions' unlike characters is that sorting, unread. Sixteen open problems are worked the same way in Parts III–VI, none of them newly derived here and each carried at its parent paper's declared grade. In full: Figure 5, p. 48, and Figure 10, p. 73.