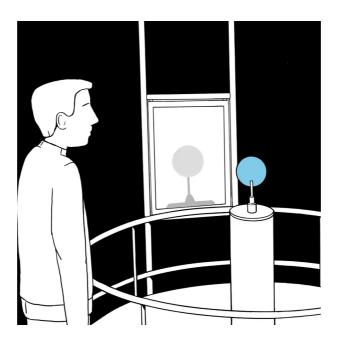
Rainbow Ball

Piero Fogliati

What colours do you see on the spinning disk?



Look at the disk when it's standing stil and when it's spinning.

The white light in this work is made by mixing orange, green, purple, and blue lights. Instead of being mixed simultaneously, as occurs normally when colours mix to make white, these lights are mixed over time – by being projected in rapid sequence, one after another. Our eyes react too slowly to see the individual flashes of colour, and we see a white light.

The light shines on a spinning white disc. Because the disc rotates at a speed related to the rate of colour change in the light, it separates the light back into its component colours and appears as a globe that continually changes colour. The impression is of a ball of coloured air.

Similar effects happen with the shadow cast by the disc on the wall – due to the rapid rotation, only one colour ever reaches the wall before the disc shadows the light again. The disc stops occasionally, revealing it is only a white disc. Thus the same aesthetic event happens in two ways.