Benham's Disc

The disc is named after an English toy maker, Charles Benham, who marketed a spinning top with this pattern in 1895.
The effect had been investigated some years earlier by Gustav Fechner and Hermann von Helmholtz. They were both aware that spinning black and white discs produced the perception of colours.
The effect is also known as 'subjective colours,' 'Fechner-Benham colours,' 'polyphan colors,' and 'pattern-induced flicker colours' (PIFCs).
The effect is not fully understood, but one theory relates to the response time of the different colour receptors in the eye, the blue ones having a slower response time than the red ones.

1). Stick this sheet onto some thick card and then cut out the disc below.
2). Put a small hole in the centre of the disc and attach to a motor to spin the disc.
3). View the disc in bright constant light and faint coloured bands should be visible when the disc is rotating a few times per second.
4). It is worth investigating how the speed of rotation and direction affect the observed colours.