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Descrizione fisica	1 online resource (xix, 395 pages) : digital, PDF file(s)
Altri autori (Persone)	SeriesCaroline WrightDavid
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Nota di contenuto	The language of symmetry -- A delightful fiction -- Double spirals and Mobius maps -- The Schottky dance -- Fractal dust and infinite words -- Indra's necklace -- The glowing gasket -- Playing with parameters -- Accidents will happen -- Between the cracks -- Crossing boundaries -- Epilogue -- Index -- Road map.
Sommario/riassunto	Felix Klein, one of the great nineteenth-century geometers, discovered in mathematics an idea prefigured in Buddhist mythology: the heaven of Indra contained a net of pearls, each of which was reflected in its neighbour, so that the whole Universe was mirrored in each pearl. Klein studied infinitely repeated reflections and was led to forms with multiple coexisting symmetries. For a century, these images barely existed outside the imagination of mathematicians. However, in the

1980s, the authors embarked on the first computer exploration of Klein's vision, and in doing so found many further extraordinary images. Join the authors on the path from basic mathematical ideas to the simple algorithms that create the delicate fractal filigrees, most of which have never appeared in print before. Beginners can follow the step-by-step instructions for writing programs that generate the images. Others can see how the images relate to ideas at the forefront of research.