



# Coloring a Complex Function

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This picture represents the shape of a complex-valued function. It comes from composing

$$R(z) = z^3 + \frac{-0.2 + 0.11i}{z^3}$$

with itself three times, computing the real part, and

then plotting the level curves of heights  $-2$ ,  $0$ , and  $2$ .

This image is in *Coloring Book of Complex Function Representations* (MAA Press, 2017). The book contains 18 such images and describes the mathematics in more detail. Call the MAA Service Center at 800-331-1622 to order.