Intro to Lecture 13

Oct. 21, 2016

Last time we found the Cauchy Riemann equations for an analytic function, investigated contour integration, and found that functions analytic in an annulus have a Laurent series.

Today we will define branch cuts and Riemann sheets. We will use contour integration to discuss integrals, in particular how closing contours of definite integrals can permit their evaluation. We will discuss how to make sense of poles that lie right on the contour of integration, and the $\pm i\epsilon$ notation for making these well defined, and showed how that distinguished between different solutions of the inhomogeneous wave equation.

• Homework assignment #6 for Oct. 31 has been posted.