On the Chaumat-Chollet example

Sławomir Dinew

Talk given at Seminar on Complex Analysis, meeting 2271, April 27, 2020

A classical theorem of Harvey and Wells states that the minimum set of a strictly plurisubharmonic function is locally contained in a totally real subvariety. We present an example, due to Chaumat and Chollet, of a minimum set of a strictly plurisubharmonic function which is not globally contained in a totally real subvariety. This shows the local character of the Harvey-Wells theorem.