Meeting: 1003, Atlanta, Georgia, SS 25A, AMS Special Session on Complex and Functional Analysis, I

1003-32-383 **Dan Coman*** (dcoman@syr.edu), Department of Mathematics, Syracuse University, Syracuse, NY 13244-1150. A note on the upper level sets of Lelong numbers for projective currents.

Let T be a positive closed current of bidimension (1,1) and unit mass on the complex projective space \mathbb{P}^n . We prove that the set $V_{\alpha}(T)$ of points where T has Lelong number larger than α is contained in a complex line if $\alpha \geq 2/3$, and $|V_{\alpha}(T) \setminus L| \leq 1$ for some complex line L if $1/2 \leq \alpha < 2/3$. We also prove that in dimension 2 and if $2/5 \leq \alpha < 1/2$, then $|V_{\alpha}(T) \setminus C| \leq 1$ for some conic C. (Received September 13, 2004)