

## ASTR410 Radio Astronomy: Midterm Exam

*I pledge my honor that I have not given or received any unauthorized assistance on this examination.*

-Official University Honor Pledge

What is meant by the brightness  
(or specific intensity) of a source?  
What of the impossible lamplight  
in a sudden snowed-over land?  
Or the brave-lit eyes of the sapling-girl  
leaning into the storm, towards  
the April she has written herself?

And what are the units for this quantity?  
Can units of Jansky express the child's  
astounding optical depth?  
Can radians account for the crying sphere  
that is her heart?

Assuming you witness her sway  
Assuming everything about your observation  
is right, is observable  
both in day & at night  
Can you now detect the source?

Possibly it is some parcel of kindness  
absorbed & emitted, or else

An imagination  
flaming quick then  
breathing in its own sure air

so gaining  
perfect stability

-Jenny Binckes Lee