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**FW: a useful integral to know**

1 message

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Eugene CHIANG has sent you a bSpace Message from Astro 7A Sections:

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**Forwarded Message****Authored By** CHIANG, Eugene ( Sep 12, 2012 4:34 PM )**To** All Participants**Subject** a useful integral to know**Label** Normal

Hello 7A,

Did you know that

$$\text{Integral (from 0 to infinity) } B_{\nu} d\nu = \text{Integral (from 0 to infinity) } B_{\lambda} d\lambda = \sigma T^4 / \pi$$
where  $\sigma$  = Stefan-Boltzmann constant.It's true! (And don't forget the  $\pi$ ). The units of this are  $\text{erg} / \text{s} / \text{cm}^2 / \text{sr}$ .

This relation may be useful to you in your career. Enjoy.

Eugene

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