Gravitational Waves

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Abstract

This is a simple document which will...

1 PreAmble

2 Equations

3 Definitions

strain = fractional change in length/distance

4 LIGO

5 References

Ross et al. (2007)

References

Ross N. P., et al., 2007, MNRAS, 381, 573

Table 1: The Lines

Name	Wavelength / Å	Transition	Rest Passband	Interpreation
Lyman-α	1215.67	2 to 1	∼FUV	Major QSO line
Lyman-β	1025.18	3 to 1	∼FUV	
Lyman-γ	972.02	4 to 1	∼FUV	
Lyman Limit	911.27	∞ to 1	∼FUV	
H-α	6563.	3 to 2	R,r	Recent major SF or AGN activity
H-β	4861.	4 to 2	B,V,g	
H-γ	4341.	5 to 2	U,B,u	
H-δ	4102.	6 to 2	∼FUV	Previous SF history
Balmer Limit	3646.	∞ to 2	∼FUV	
HI	3646.	∞ to 2	∼FUV	
HII	3646.	∞ to 2	∼FUV	
HeI	3646.	∞ to 2	∼FUV	
HeII	3646.	∞ to 2	∼FUV	
HeIII	3646.	∞ to 2	∼FUV	
CIV	3646.	∞ to 2	∼FUV	Major QSO line
OII	3646.	∞ to 2	∼FUV	Major QSO line
OIII	3646.	∞ to 2	∼FUV	Recent major SF line
OIII	5007.	∞ to 2	∼FUV	Recent major SF line
Ca II H	3999.	∞ to 2	∼FUV	Old stellar pop
Ca II K	4001.	∞ to 2	∼FUV	Old stellar pop
NII	5007.	∞ to 2	∼FUV	
NeV	3646.	∞ to 2	∼FUV	Major QSO line
[OIII λ 5007/ Hβ] [NII λ 6583/ Hα]				"BPT" diagram reliable tool for determining sou of line emission from a galaxy visually differentia between Seyferts, LINERs and SF gals. However "low" redshifts since need Hα, (not at $z \sim 1$). Modified BPT with $(U-B)$ colour replacing [NII λ 6583/ Hα] e.g. Montero-Dorta, 0801.2769
[SII λ 6583/ Hα]		∞ to 2	∼FUV	Major QSO line
[α/Fe]	3646.	∞ to 2	∼FUV	Major QSO line
NV	1???.67	2 to 1	∼FUV	Major QSO line
SiIV	1???.67	2 to 1	∼FUV	Major QSO line
CIV	1???.67	2 to 1	∼FUV	Major QSO line
CIII]	1???.67	2 to 1	∼FUV	Major QSO line
MgII	1???.67	2 to 1	∼FUV	Major QSO line