List of Figures

2.1	Variation of density against radial variable r	31
2.2	Variation of radial pressures against radial variable r	31
2.3	Variation of tangential pressures against radial variable r	32
2.4	Variation of $\frac{dp_r}{d\rho}$ against radial variable r	32
2.5	Variation of $\frac{dp_{\perp}}{d\rho}$ against radial variable r	33
2.6	Variation of anisotropy against radial variable r	33
2.7	Variation of strong energy condition against radial variable r	34
2.8	Variation of adiabatic Index against radial variable r	34
2.9	Variation of gravitational redshift against radial variable r	35
2.10	Variation of a stability expression $\left(\frac{dp_{\perp}}{d\rho} - \frac{dp_r}{d\rho}\right)$ with respect to a radial coordinate r	35
2.11	Variation of three forces like Gravitational Force(Blue), Hydrostatic Force(Orange) and Anisotropic Force(Green)	36
3.1	Variation of density (ρ) in MeV F m^{-3} with respect to a radial coordinate r for a star PSR J1903+327 within the range $[0,9.438]$ kms for different values of n	49
3.2	Variation of radial pressures (p_r) in MeV F m^{-3} with respect to a radial coordinate r for a star PSR J1903+327 within the range $[0,9.438]$ kms for different values of n	50
3.3	Variation of tangential pressures (p_{\perp}) in MeV F m^{-3} with respect to a radial coordinate r for a star PSR J1903+327 within the range [0,9.438] kms for different values of n	51
3.4	Variation of radial sound speed $\frac{dp_r}{d\rho}$ with respect to a radial coordinate r for a star PSR J1903+327 within the range [0,9.438] kms for	
3.5	different values of n	51
	for different values of n	52

3.6	Variation of anisotropy $(8\pi\sqrt{3}S)$ in MeV F m^{-3} with respect to a radial coordinate r for a star PSR J1903+327 within the range [0,9.438] kms for different values of n	52
3.7	Variation of strong energy conditions $(\rho - p_r - 2p_\perp)$ in MeV Fm ⁻³ with respect to a radial coordinate r for a star PSR J1903+327 within	52
	the range [0,9.438] kms for different values of n	53
3.8	Variation of Adiabatic Index (Γ) with respect to a radial coordinate r for a star PSR J1903+327 within the range [0,9.438] kms for different	
2.0	values of n	53
3.9	Variation of Gravitational Redshift (Z_G) with respect to a radial coordinate r for a star PSR J1903+327 within the range $[0,9.438]$ kms for different values of n	54
3.10	Variation of a stability expression $\left(\frac{dp_{\perp}}{d\rho} - \frac{dp_r}{d\rho}\right)$ with respect to a radial	0.1
	coordinate r for a star PSR J1903+327 within the range $[0,9.438]$ kms for different values of n	54
3.11	Variation of three forces Gravitational Force(Blue), Hydrostatic Force(On	range)
	and Anisotropic Force(Green) for the compact star PSR J1903+327.	55
4.1	Variation of density (ρ) against the radial parameter r	70
4.2	Variation of radial pressures (p_r) against the radial parameter r	71
4.3	Variation of tangential pressures (p_{\perp}) against the radial parameter r .	71
4.4	Variation of $\frac{dp_r}{d\rho}$ against the radial parameter r	72
4.5	Variation of $\frac{dp_{\perp}}{d\rho}$ against the radial parameter r	72
4.6	Variation of anisotropy $(p_r - p_\perp)$ against the radial parameter r	73
4.7	Variation of strong energy condition $(\rho - p_r - 2p_{\perp})$ against the radial	
	parameter r	73
4.8	Variation of adiabatic Index against radial variable r	74
4.9	Variation of gravitational redshift against radial variable r	74
	Variation of a stability expression $\left(\frac{dp_{\perp}}{d\rho} - \frac{dp_r}{d\rho}\right)$ with respect to a radial coordinate r	74
4.11	Variation of three forces like Gravitational Force(Blue), Hydrostatic Force(Orange) and Anisotropic Force(Green) for 4U1820-30 star	75
4.12	Variation of a mass M with a radius R for various stars. $\ \ldots \ \ldots \ \ldots$	75
5.1	Variation of density against radial variable r	89
5.2	Variation of radial pressures against radial variable r	90
5.3	Variation of tangential pressures against radial variable r	91
5.4	Variation of $\frac{dp_r}{d\rho}$ against radial variable r	91
5.5	Variation of $\frac{dp_{\perp}}{dp_{\perp}}$ against radial variable r	92

5.6	Variation of anisotropy against radial variable r	92
5.7	Variation of strong energy condition against radial variable $r.$	93
5.8	Variation of adiabatic Index against radial variable r	93
5.9	Variation of gravitational redshift against radial variable r	93
5.10	Variation of a stability expression $\left(\frac{dp_{\perp}}{d\rho} - \frac{dp_r}{d\rho}\right)$ with respect to a radial coordinate r	94
	Variation of three forces like Gravitational Force (Blue), Hydrostatic Force (Orange) and Anisotropic Force (Green) for the value $\alpha=0.07$.	94
	Variation of three forces like Gravitational Force (Blue), Hydrostatic Force (Orange) and Anisotropic Force (Green) for the value $\alpha=0.15$.	94
5.13	The relation between the pressure p_r and density ρ is plotted for the compact star	95
6.1	Variation of density against radial variable r	116
6.2	Variation of radial pressures against radial variable r	116
6.3	Variation of tangential pressures against radial variable r	117
6.4	Variation of $\frac{dp_r}{d\rho}$ against radial variable r	117
6.5	Variation of $\frac{dp_{\perp}}{d\rho}$ against radial variable r	
6.6	Variation of anisotropy against radial variable r	
6.7	Variation of strong energy condition against radial variable r	119
6.8	Variation of adiabatic Index against radial variable r	119
6.9	Variation of Gravitational redshift against radial variable r	120
6.10	The causality condition with respect to the radial coordinate r	120
6.11	Variation of three forces (QoS) like Gravitational Force(Blue), Hydrostatic Force(Orange) and Anisotropic Force(Green) with respect to the radial coordinate r	с 121
6.12	Variation of three forces (LoS) like Gravitational Force(Blue), Hydrostatic Force(Orange) and Anisotropic Force(Green) with respect to the radial coordinate r	
6.13	Variation of three forces (PoS) like Gravitational Force(Blue), Hydrostati Force(Orange) and Anisotropic Force(Green) with respect to the radial coordinate r	c
6.14	Variation of three forces (CoS) like Gravitational Force(Blue), Hydrostatic Force(Orange) and Anisotropic Force(Green) with respect to the radial coordinate r	
6.15	Variation of three forces (CFL) like Gravitational Force(Blue), Hydrostat Force(Orange) and Anisotropic Force(Green) with respect to the radial coordinate r	ic 193