



Figure 2.5: The best correlations for  $T_{lag} - V$ ,  $V - L$ ,  $T_{RT} - L$ ,  $E_{peak} - E_{iso}$ ,  $E_{peak} - E_{\gamma}$ ,  $E_{peak} - L$ , for all 3 redshift range of pantheon sample using Gaussian process. The error bars show the  $1\sigma$  uncertainties.