

MAE108, Assignment 1

A particle, injected at the entrance of a tube, exits the tube at a certain time T , which is often called a “particle travel time”. This experiment is repeated 50 times, with the results (in seconds) recorded in Table 1.

0.9391654051586	0.9728575854924	0.9985404223834	0.9242484558682	0.8526212258054
0.9028882737566	0.9996235129402	0.9860738129057	0.9776028143582	0.9790621181529
0.9980457450759	0.9902402254118	0.9657606753652	0.9920789066996	0.9835623760072
0.9616143527952	0.9878920824481	0.8709955372472	0.9173337301835	0.9485435642456
0.9306928946696	0.9078890918104	0.9906715718921	0.9136052681072	0.9851032461834
0.8805083094253	0.9873190249767	0.9114207610606	0.7822761486233	0.9266697286404
0.9292548434560	0.9878165679255	0.9936216011003	0.9020375887679	0.9581677858221
0.9181340069413	0.9438927329063	0.9768915861315	0.9691661867958	0.8194094598921
0.9918389704988	0.9745924456692	0.9390604146207	0.8767547134731	0.9345915385151
0.6309099901487	0.9540463993485	0.9563762607886	0.8203979971677	0.9295265195401

Problem 1

Plot three raw histograms with bin sizes 0.01 s, 0.02 s and 0.05 s.

Problem 2

Plot the corresponding empirical frequency functions.

Problems 3 & 4

Problems 2.1 and 2.2. from the book.