

1. The planes can be seen clearly in `planes.png`. In `planes.py.png`, we see the distribution of points from numpy's random number generator. The plane effect is not observed. I was unfortunately not able to get `test_broken_libc.py` to run on my laptop.
2. A Lorentzian distribution works well in this case because it goes to zero slower than the exponential. For an exponential PDF  $p(x) = \alpha e^{-\alpha x}, x > 0$ , we can choose a the bounding distribution  $p'(x) = \alpha/[1 + (\alpha x)^2], x > 0$  which will always be greater than or equal to  $p(x)$  (in both cases  $y = 0$  for all  $x < 0$ ). I believe this is the most efficient Lorentzian bounding function. Code for my rejection method is shown in `p23.py`, and the resulting histogram is shown in `expdev_rejection.png`, where the red line shows the expected curve. My rejection generator keeps about 64% of the points.
3. My ratio-of-uniforms generator can be seen in `p23.py`. For  $0 < u < 1$  and  $\alpha = 1$ , I find that  $v$  goes from 0 to about 0.736. My ratio-of-uniforms generator keeps about 68% of the points.