## (number piece)

polansky
for the Cage 100 Party Pieces Project
one minute piece, for cello, viola, violin, piano, marimba/xylophone/vibraphone (1 player), accordion, trombone, trumpet, bassoon, oboe

The first nine odd harmonic partials $(2,3,5,7,9,11,13,15,17)$ are distributed to the 10 instruments, the percussion doubling three of the other instruments. Intonations close to 12ET were given to fixed pitched instruments, variable pitched instruments were given the others.

The duration of a pitch within the 60 " time span is proportional to it's "harmonic distance," computed as the $\log _{2}$ of a number theory function (Euler's GS) which measures something like (harmonic) "complexity" of a number or interval. The starting time of each note was calculated as some random time between the possible latest starting time (given the duration and the length of the piece) and the golden mean of that duration. In other words, if a note's duration 30", it must start before 30", and it's absolute starting time is thus somewhere between about 18 " and $30 . "$

In homage to Cage's own late practice, I wrote a short, quite general, computer program to make this piece, and maybe many others with different pitches, lengths, starting time calculation methods, and so on.

1p
Yom Kippur, 5773

