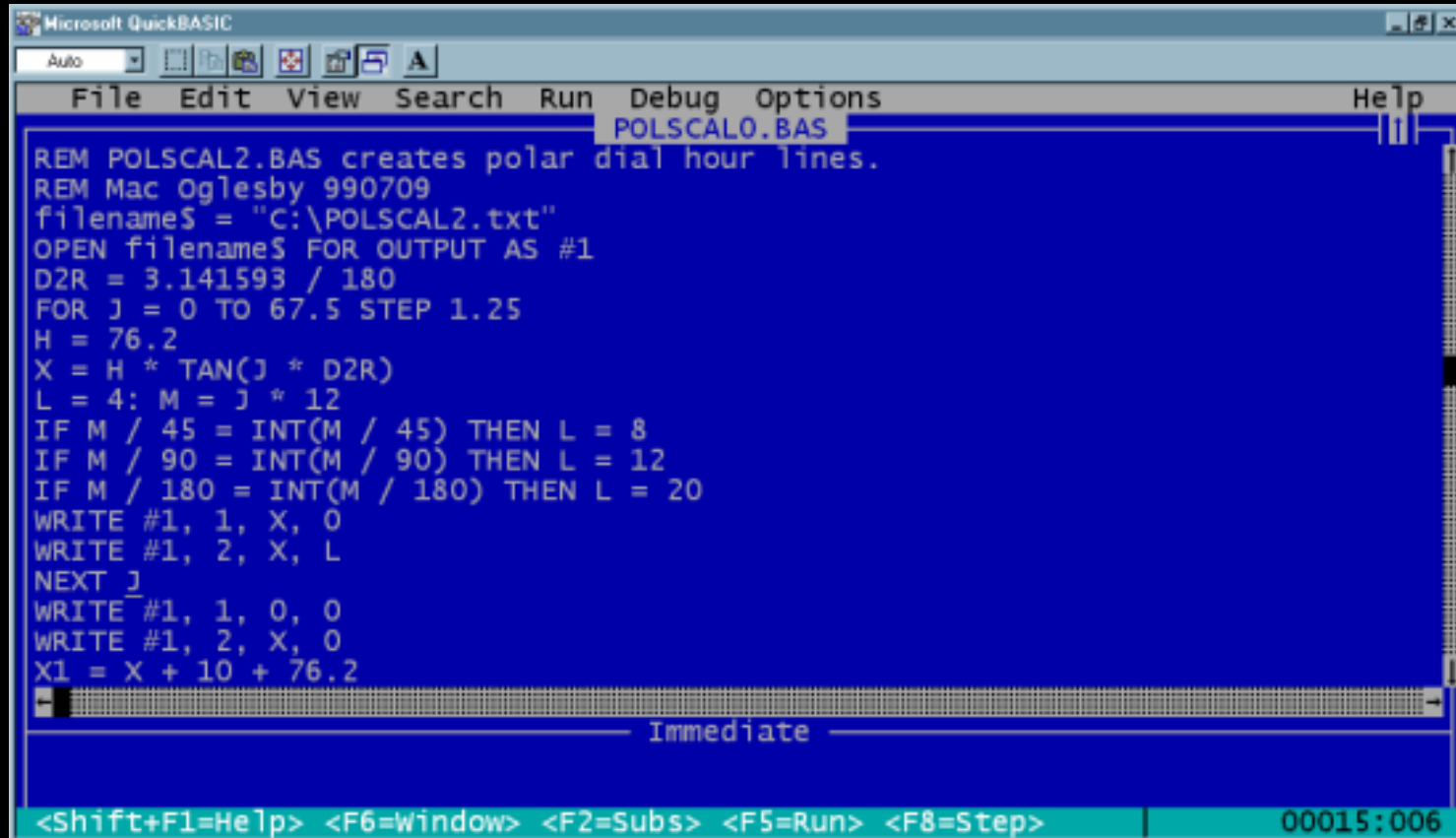


```
In [1]: IPython
      ...: Thomas Kluyver
      ...:
```

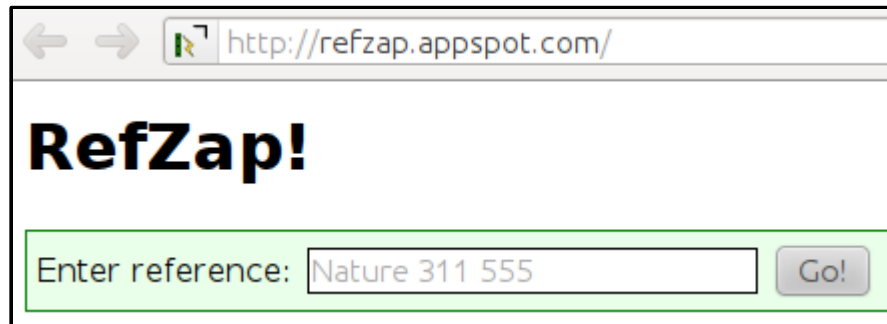
# My background



```
Microsoft QuickBASIC
Auto
File Edit View Search Run Debug Options Help
POLSCALO.BAS
REM POLSCAL2.BAS creates polar dial hour lines.
REM Mac Oglesby 990709
filename$ = "C:\POLSCAL2.txt"
OPEN filename$ FOR OUTPUT AS #1
D2R = 3.141593 / 180
FOR J = 0 TO 67.5 STEP 1.25
H = 76.2
X = H * TAN(J * D2R)
L = 4: M = J * 12
IF M / 45 = INT(M / 45) THEN L = 8
IF M / 90 = INT(M / 90) THEN L = 12
IF M / 180 = INT(M / 180) THEN L = 20
WRITE #1, 1, X, 0
WRITE #1, 2, X, L
NEXT J
WRITE #1, 1, 0, 0
WRITE #1, 2, X, 0
X1 = X + 10 + 76.2
Immediate
<Shift+F1=Help> <F6=Window> <F2=Subs> <F5=Run> <F8=Step> 00015:006
```

[http://www.mysundial.ca/tsp/images/qbasic\\_program.gif](http://www.mysundial.ca/tsp/images/qbasic_program.gif)

# My background



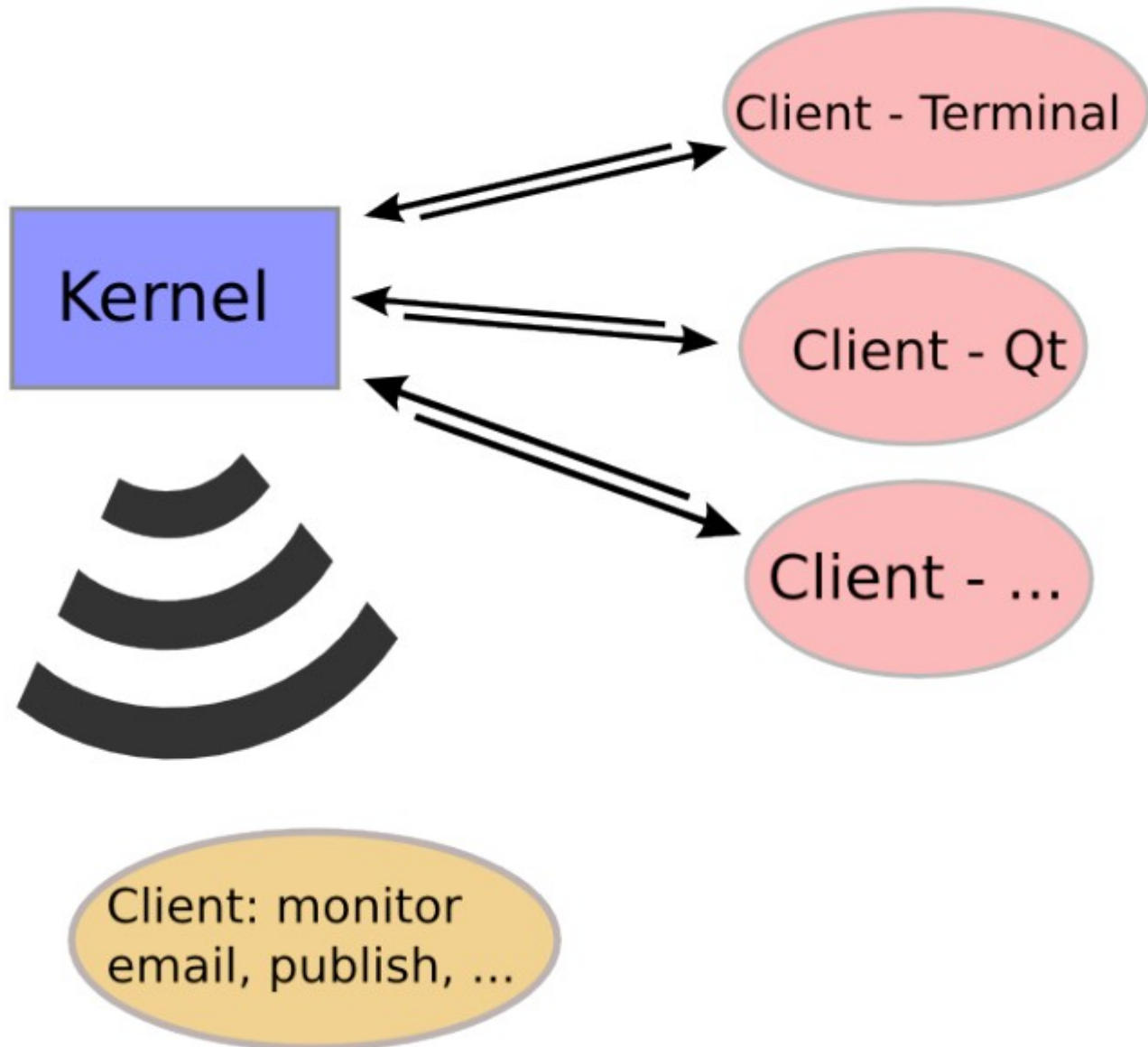
# Why IPython?

- `obj.[tab]`, `obj?`, `obj??`
- `files = !ls`, `!wget $url`
- Magic commands:
  - `%run script.py` (-p → profile, -t → time)
  - `%debug` (jump in *after* an exception)
  - `%save cmds.py 1-7 42 51`
  - `%lsmagic` (see the rest)

<http://ipython.org/ipython-doc/stable/interactive/tutorial.html>

# History

- 2001: IPython 0.0.1
  - 259 lines, vs. over 100k now
- 2004: First parallel computing tools
- 2008: WX IPython interfaces
- 2010: ØMQ
  - + Python 3 port



Demos

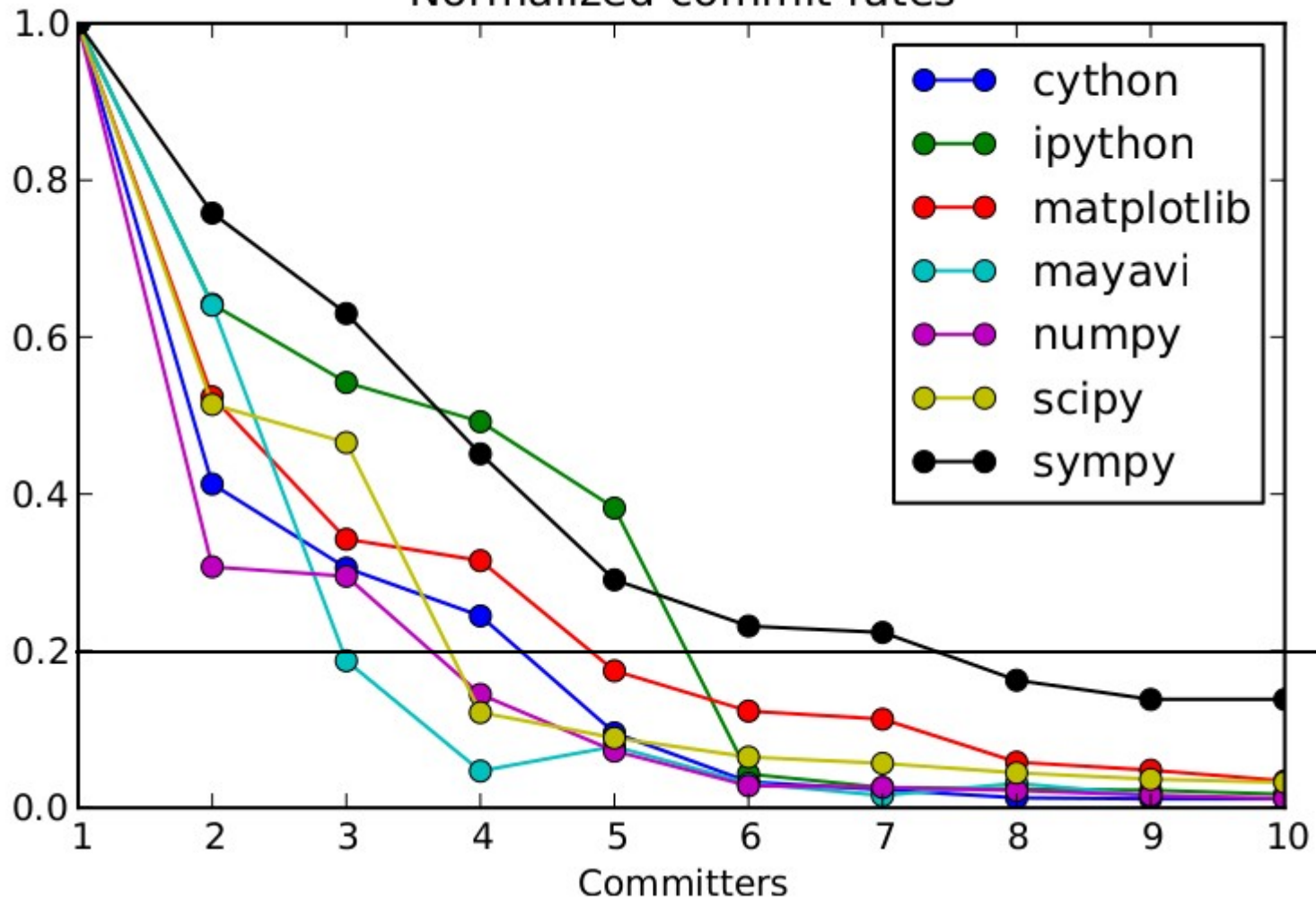
Fernando Perez  
Brian Granger  
Min Ragan-Kelley



Evan Patterson – Caltech/Enthought  
Robert Kern – Enthought  
Jörgen Stenarson – Sweden  
Ondrej Certik – U. Nevada Reno  
Darren Dale – Cornell  
Laurent Dufrécho – France  
James Gao – UC Berkeley  
Satra Ghosh – MIT Neuroscience  
John Hunter – TradeLink Securities, Chicago  
Paul Ivanov – UC Berkeley  
Prabhu Ramachandran – IIT Bombay  
Justin Riley – MIT  
Thomas Spura – Fedora project  
Ville Vainio – Tampere University of Technology,  
Finland  
Stefan van der Walt – U. Stellenbosch, South  
Africa  
Gaël Varoquaux – Neurospin (Orsay, France)  
Mark Voorhies – UC San Francisco  
*Many more...*



Normalized commit rates





**I WANT YOU**  
**FOR Scientific Python**  
NEAREST **Github repo**