DIC design doc

Objectives:

* Python platform of TBB Matlab DIC code
* Object oriented
* Heaviside compatible
* Multiple polynomial surface fitting
* Parallelised

Deck

* Import images from folder as ImSet class
* Imset.lazy\_import(‘folder name’)
  + Clean up names, figure out order

*Assuming corrected images*

* Run DIC on all images: displacements = get\_DIC( Imset[0,1], Settings )
  + Load properly the arrays
  + Conv to gray
  + FFT (user input numbers)
  + Split into subsets
  + Calculate XCF PH for each subset vs all other subsets
    - In series take a subset, then in parallel compare to all other subsets
  + Output displacements and rotations
* Strains = get\_strains(displacments,strain\_settings)

1. Load the data into Imset – Tom
2. Correct and flatten + filter – Alex
3. Get XCF peak heights – Tom
4. Get strains from displacements – Alex