Naming variables

Variable names should be in mixed case starting with lower case.

```
spikeRate numBins stimFreq
```

Variables with a large scope should have meaningful names. Variables with a small scope can have short names.

```
i j k m n (for scratch integers)
```

The prefix n should be used for variables representing the number of objects.

```
nFiles nChannels
```

Negated boolean variable names should be avoided.

Use `isFound` instead of `~isNotFound`

Acronyms, even if normally uppercase, should be mixed or lower case

Use `html` and `checkTiffFormat` instead of `hTML` and `checkTIFFFormat`

Avoid using a keyword or special value name for a variable name. Reserved words are listed by the command `iskeyword`.

Writing functions

Names of functions should be written in lower case. Underscores may be used to enhance readability.

```
get_name compute_total_width
```

Functions should have meaningful names.

Use comments to add useful information to the code. Typical uses for comments are to explain usage, provide reference information, to justify decisions, to describe limitations, to mention needed improvements. It is usually better (and easier) to write comments at the same time as the code rather than to intend to add comments later.

Consider documenting important variables in comments near the start of the file.

```
%set plotFigs to 1 to plot figures, otherwise set to
0.
```

Loop variables should be initialized immediately before the loop.

```
list=[];
```

```
for i=1:5
    list=[list i];
end
```

A switch statement should include the otherwise condition. Leaving the `otherwise` out is a common error, which can lead to unexpected results.

```
switch (condition)
case ABC
    statements;
case DEF
    statements;
otherwise
    statements;
end
```

Use of white space

Focus on readability

```
simpleSum=firstTerm+secondTerm;

simpleSum = firstTerm+secondTerm;

simpleSum = firstTerm + secondTerm;
```

Surround operators by a space?

```
average = (firstTerm + secondTerm) / two;
```

Follow commas with a space?

```
foo(alpha, beta, gamma)
foo(alpha,beta,gamma)
```

Logical groups of statements within a block should be separated by one blank line.