TITLE

AUTHOR

1. Section

1.1. **Subsection.** A formula that could come in handy:

$$\hat{f}(\chi) = \sum_{g \in G} f(g)\chi(g^{-1}). \tag{1.1}$$

We can use `\widehat` to get a hat that stretches: for instance, $\widehat{F}$.

Theorem 1.1 (Terras)**.** *A theorem environment.*

Definition 1.2. A definition environment. It contains a link to Theorem 1.1.

Remark 1.3. A remark environment. It contains a link to equation (1.1).

Here are examples of the matrix commands. To typeset a matrix inline with the text, use `\psmat{ }` like so: $\left(\begin{smallmatrix} a & b \\ c & d \end{smallmatrix}\right)$. To typeset it as a display, use `\pmat{ }`:

$$\begin{pmatrix} 1 & x & z \\ & 1 & y \\ & & 1 \end{pmatrix}. \tag{1.2}$$

If the matrix is very large, then display will look better than inline.

Here is a sequence of equations formatted with the `align` environment:

$$\begin{aligned} \|T^m p - u\|_2^2 &= \left\| \left(\sum_{j=1}^{n} \langle p, \phi_j \rangle \lambda_j^m \phi_j \right) - u \right\|_2^2 \\ &= \left\| \sum_{j=2}^{n} \langle p, \phi_j \rangle \lambda_j^m \phi_j \right\|_2^2 \\ &= \sum_{j=2}^{n} |\langle p, \phi_j \rangle|^2 |\lambda_j|^{2m}. \end{aligned} \tag{1.3}$$

I used the `split` environment to avoid numbering each line separately.

Lastly: The AMS helpfully provides a list of the correct abbreviations to use in citations for the names of journals. Use an en dash (in TEX: `--`) instead of a hyphen (`-`) to typeset page ranges.

References

[T] A. Terras. *Fourier Analysis on Finite Groups and Applications*. Cambridge University Press (1999).

[W] A. Wiles. Modular Elliptic Curves and Fermat's Last Theorem. *Ann. of Math. (2)*, **141**(93) (May, 1995), 443–551.