



Database of Macromolecular Movements

with Associated Tools for Geometric Analysis

This describes the motions that occur in proteins and other macromolecules, particularly using movies. Associated with it are a variety of free software tools and servers for structural analysis.

View entry:

OR

Search motions database:

Full-text

Search



Movies

[Gallery of movies](#) ([new ranker interface](#)) of protein motions. If you want to make your own movie, we have a [Morph Server](#) that will interpolate between any two protein conformations, generating a movie. Also, a server with a [simplified interface](#). The [highlights page](#) shows some of the best movies in the database, all generated by the morph server. (Alternate, [MPEGs-only](#) page.)



Papers

- A general *Scientific American* article on water and protein motions [[full-text](#)]
- The database citation: M Gerstein & WG Krebs (1998). *Nuc. Acid. Res.* **26**:4280-4290 [[medline](#)].
- [More papers...](#)



Software

This includes [freeware](#) for calculating volumes, surfaces, axes, angles, and distances. Also, there is information about [VRML](#).



Browse

The main database is arranged around a multi-level classification scheme (e.g. motions of loops, domains, or subunits). It can either be viewed as individual motions by selecting from the menu above, or as a [full outline](#). The overall classifications scheme is briefly described on the [help page](#). Also available are: a focus page on [motions in membrane proteins](#), [schematic](#), or a raw [SQL data dump](#).



Edit

You can add a comment, including a link or reference, to any motion report by clicking on "Add a comment" at the top of each motion page. Other comments, suggestions, and submissions are highly encouraged and should be emailed to motions@bioinfo.mbb.yale.edu. If you want to link directly to entries in the database, [more information](#) is available.