Visualization Functions

Hierarchical Motor Control/demos and tests/

* **plot\_obstacles(B)** – using 3D cubes, plots obstacles of space B. This is what makes the green blocky “robot” seen in most plots. Note that it is only showing where obstacles are in B – if fillSelfObstacles() has not been called yet, the green blocky robot will not show up.
* **plot\_path(B, path, color)** – plots the given path of N points (path is Nx3) in the specified color, also showing the obstacles in B.
* **plot\_posture(B, posture, side)** – show posture as connected 3D lines for each arm segment, and plus signs at each joint
* **plot\_movement\_stills(B, movement, side)** – for visualizing the entire movement through time. Given a movement with N postures (Nx7), plots each posture and obstacles. The first posture in the movement is blue and the last is red, the rest are a gradient between (purple is the middle posture). This is the best way to visualize a movement.

These are all 3D plots that can be rotated, etc…

Many of these also take an optional argument fig\_in, which is a plot handle that the plot should be placed on. I.E. to show a path on a figure that already has a posture, the code would be fig = plot\_posture(…); plot\_path(B, path, color, fig).