1056-53-82 **Julia C Bennett*** (`juliacbennett@gmail.com`), 6449 Regent St., Oakland, CA 94618, **David V Cochran** (`cochrandv@vcu.edu`), 2705A Floyd Ave., Richmond, VA 20135, and **Kaitlin Woskoff** (`woskoffk@hartwick.edu`), 68 Granada Circle, Mount Sinai, NY 11766. *Symplectic Volumes and Ribbon Graphs.*

Volume is a concept which, usually in our minds, exists only in three dimensions. Pardoning the said connotation, it makes perfect sense to talk about the volume of objects of any dimension. We investigate the calculation of the volume of ribbon graph complexes: structures which are characterised by dimension.

There is a well-defined (though tiresome) approach to these calculations which we use to launch our invesigation, enabling us to approach the problem differently. As it turns out, ribbon graph complexes have many nice properties which allow us to use methods from symplectic geometry to generalize the volume calculations – relating the volume of a complex of some dimension to that of a complex of lower dimension – allowing us to recursively calculate the volume of complexes of arbitrary dimension. (Received July 23, 2009)