A Wonderful World of Calculus Integrals

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This topic is inspired by the previous nice talk of Behnam Esmayli who gave a good and deep explanation of the nature of integrals, especially surface integrals.

In this talk we will consider a variety of Calculus integrals: singular, double, triple, line, surface, and try to answer the following questions:

- Why is it so many of them and how different they are?
- Do they have anything in common and what?
- Are they all connected and how?

And many others.

Not a single integral will be tortured, divided into parts, or computed during this presentation.

For understanding the concept a completed course in Calculus 1 is sufficient although knowledge of Calculus 3 is beneficial.

