Dawson function

Def

For ,

=

For ,

=

Property

For ,

=

=

=

Complex plane

=

=

=

=

=

=

for real x.

where

is Faddeeva function.

ODE

With initial condition = 0

Consequently, it has extrema for

=

Inflection points follows for

=

Ref

[Dawson function - Wikipedia](https://en.wikipedia.org/wiki/Dawson_function)