



Linux Ubuntu 26.04 Manual Pages on command 'catanh.3'

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STANDARDS

C11, POSIX.1-2008.

HISTORY

glibc 2.1. C99, POSIX.1-2001.

EXAMPLES

```
/* Link with "-lm" */

#include <complex.h>
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>

int
main(int argc, char *argv[])
{
    double complex z, c, f;

    if (argc != 3) {
        fprintf(stderr, "Usage: %s <real> <imag>\n", argv[0]);
        exit(EXIT_FAILURE);
    }

    z = atof(argv[1]) + atof(argv[2]) * I;
    c = catanh(z);

    printf("catanh() = %6.3f %6.3f*i\n", creal(c), cimag(c));
    f = 0.5 * (clog(1 + z) - clog(1 - z));

    printf("formula = %6.3f %6.3f*i\n", creal(f), cimag(f));
    exit(EXIT_SUCCESS);
}
```

SEE ALSO

[atanh\(3\)](#), [cabs\(3\)](#), [cimag\(3\)](#), [ctanh\(3\)](#), [complex\(7\)](#)

Linux man-pages 6.17

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[catanh\(3\)](#)