



Figure 1: Input Distribution $N(0, 2)$ (solid), Output Distribution (dashed)

Consider the simple program that accepts an integer as input and returns its absolute value.

```
int abs(int x) {
    if (x < 0)
        return -x;
    else
        return x;
}
```

Figure 1 shows the normally distributed input (in solid) and the output distribution which accumulates the probability mass of the negative inputs onto the negated positive values on output.