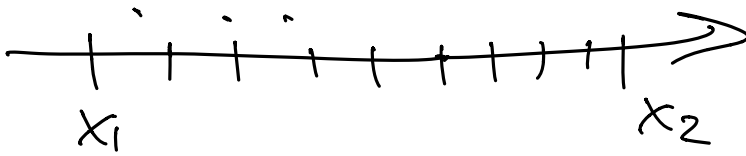


1D histogram



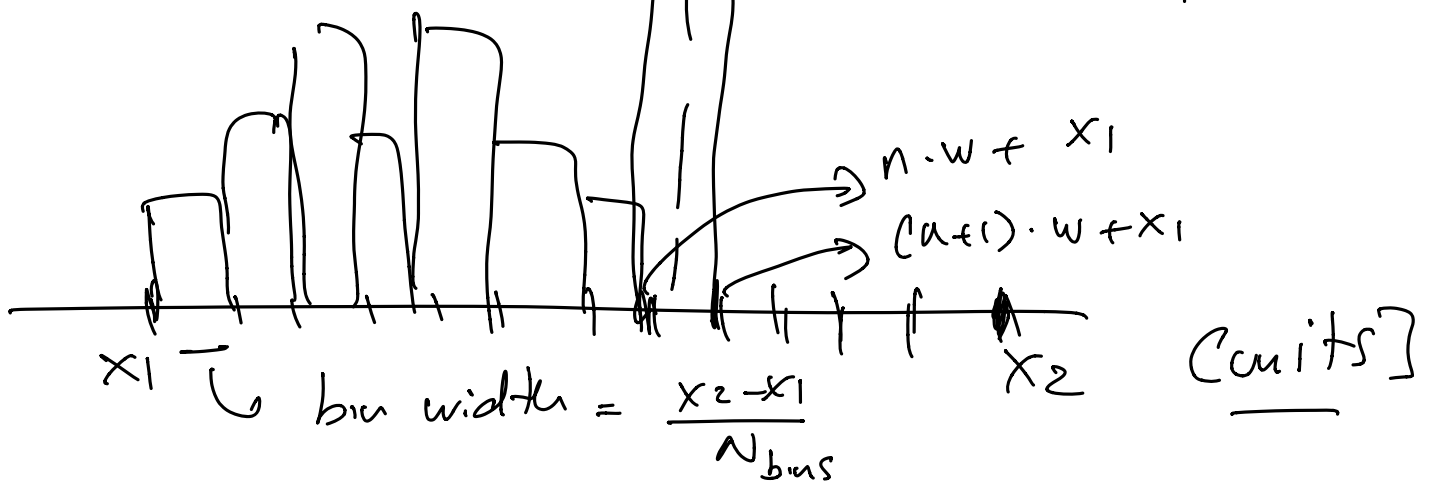
$$x \in [x_1, x_2]$$

x_i measurements — $N_{\text{measurements}}$
auth.
{
|
}

$x_1 \rightarrow x_2$ in N bins.

$N_{\text{measurements}} \{x_i\}$
Count

$$\{x_i\} \in [x_1 + n \cdot w, x_1 + (n+1)w]$$



class Histogram {

attributes

private:

double x_1

string name

double x_2

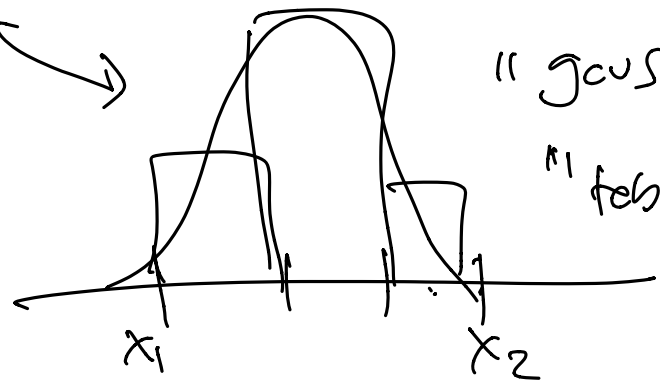
string description

int N_{bins}

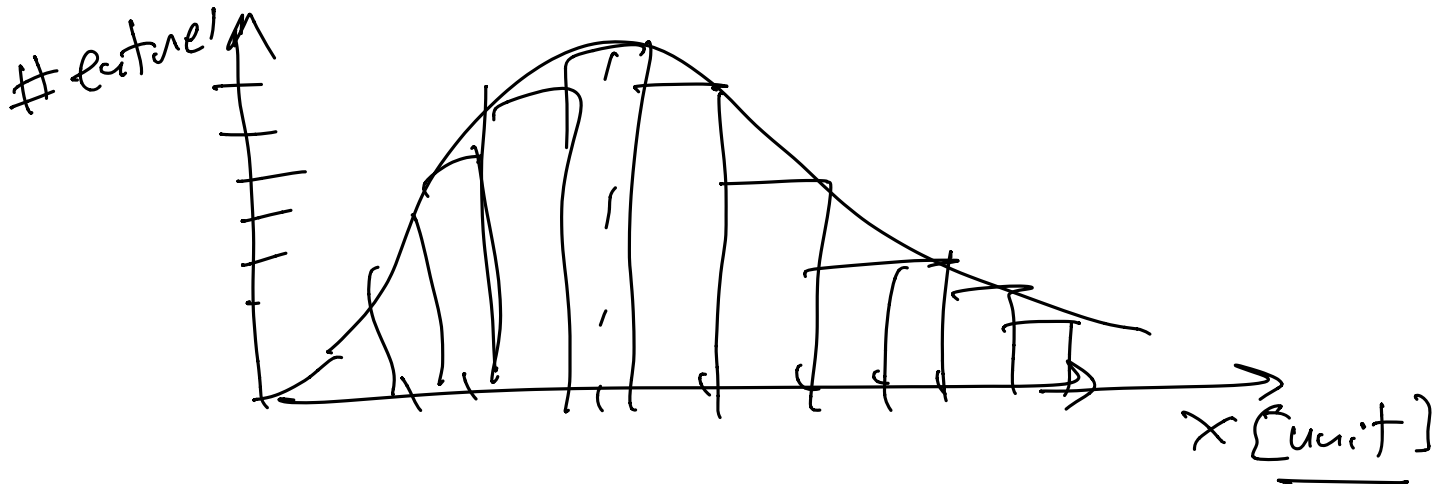
"flat"
"grades"



"gaussian"
"table length"



Distribution of e^- energy.



Histogram h ("first", "Energy Distribution",

$100, 0, 10.);$
 \swarrow \downarrow \downarrow
 #bins x_{low} x_{high}

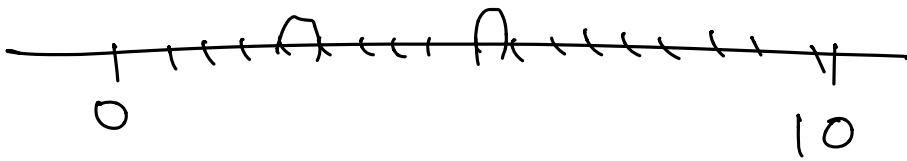
vector<float> printry;
 date.push-back(---)

1.5	2.5	-0.5	3.2	4.3	1.7
-----	-----	------	-----	-----	-----

~~h.Date (plate)~~

h.Fill Date (point 1);

h.Fill Date (1.2)



context[0] = 0.

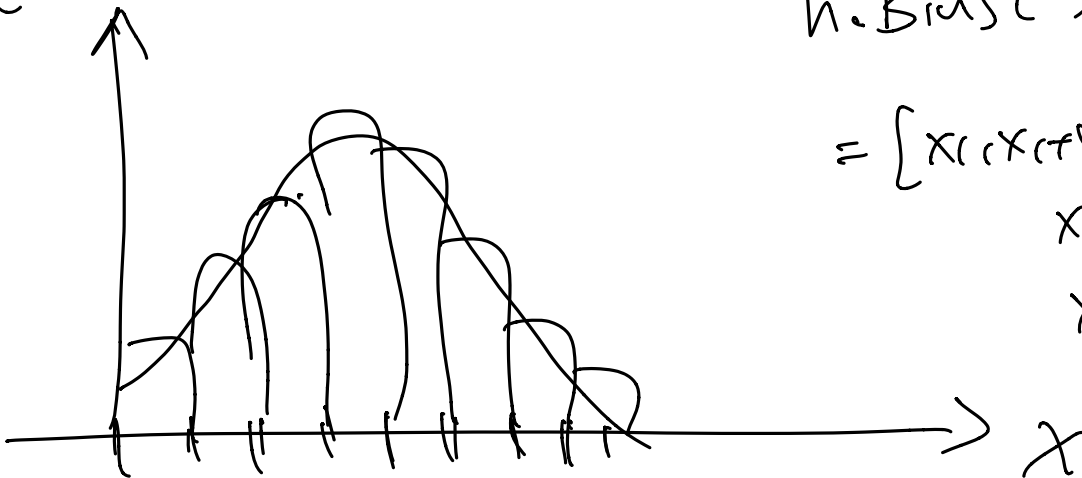
}

context[45] = 0

h.Fill(-)

h.Fill(-,)

entries



h.print()

h.mean()

h.stdDev()

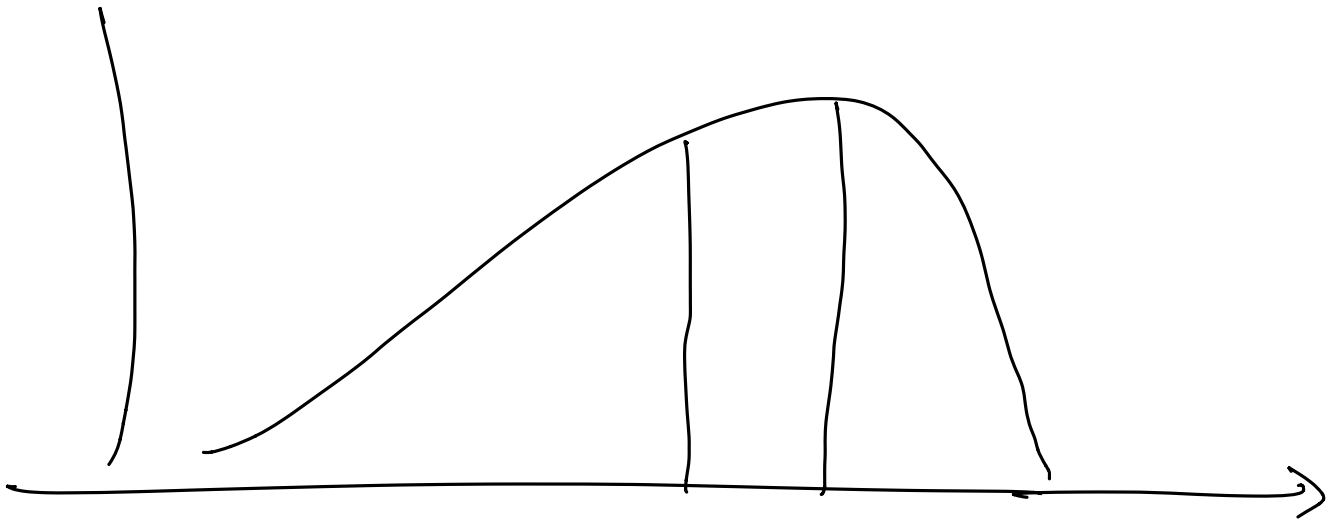
h.Bias()

$= [X_1, X_1 + w, X_1 + 2w,$

$X_1 + 3w, \dots,$

$X_1 + (n-1)w]$

h.Fit(- -)



h. mode()

h. median()

h. average()

double x = 1.2, y = 2.3;

double z = x + y;

Datum d1(1.2, 0.1), d2(-0.2, 0.05);

Datum d3 = d1 + d2;

1/d3;

d2 * d3

Datum $d3 = d1 + d2$;

Datum $d3 = d1.\text{plus}(d2)$

$d3 = d1.\underline{\text{operator+}}(d2)$

Datum $\text{operator+}(\text{Datum } in) \text{ (const)?}$

Datum $\text{operator+}(\text{const Datum\& } in)$

int $i = 2, j = 3;$

int $l = i + j$

① $\text{operator+}(j)$

class int {

int $\text{operator+}(\text{const int\& } in) \text{ const.}$

}

Datum d1(4.4, 0.1);

Datum d2 = d1 + 1.5;

d1.operator(1.5)

Datum operator+(const int& rhs) const