

Mathematische Statistik

Binomialverteilung

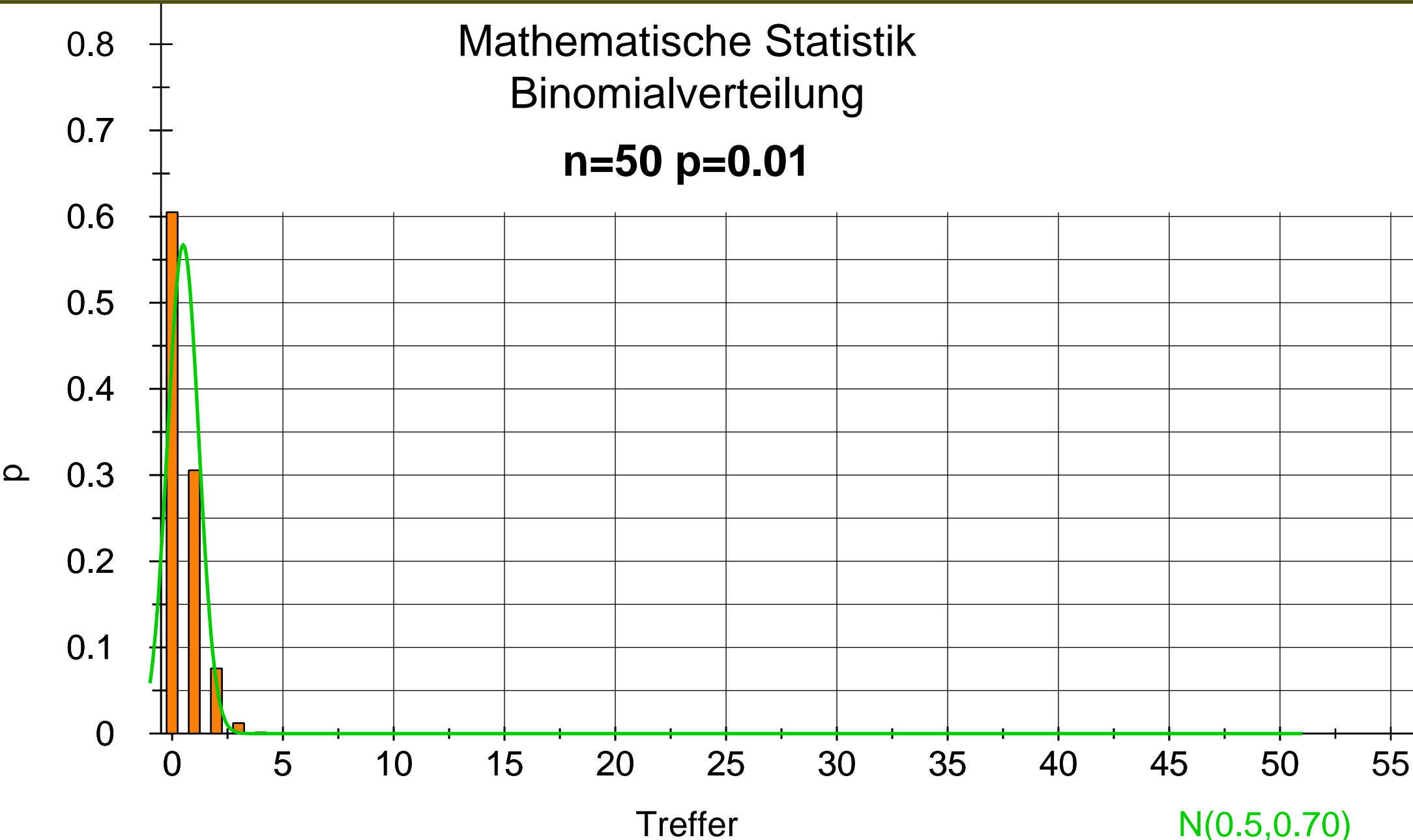
G. Wegener

Hannover, im Oktober 2017,
alle Rechte vorbehalten.

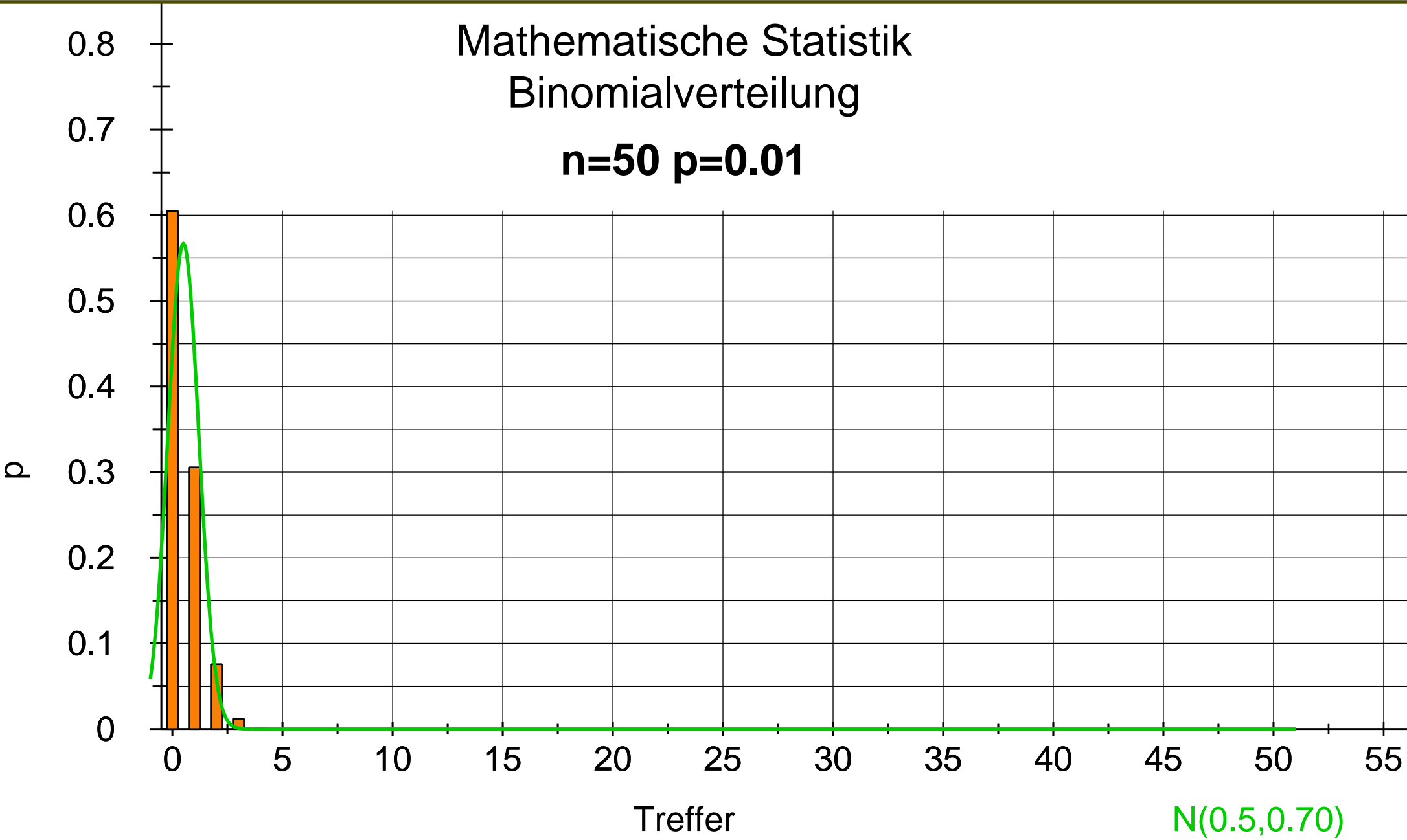
Mathematische Statistik

Binomialverteilung

n=50 p=0.01

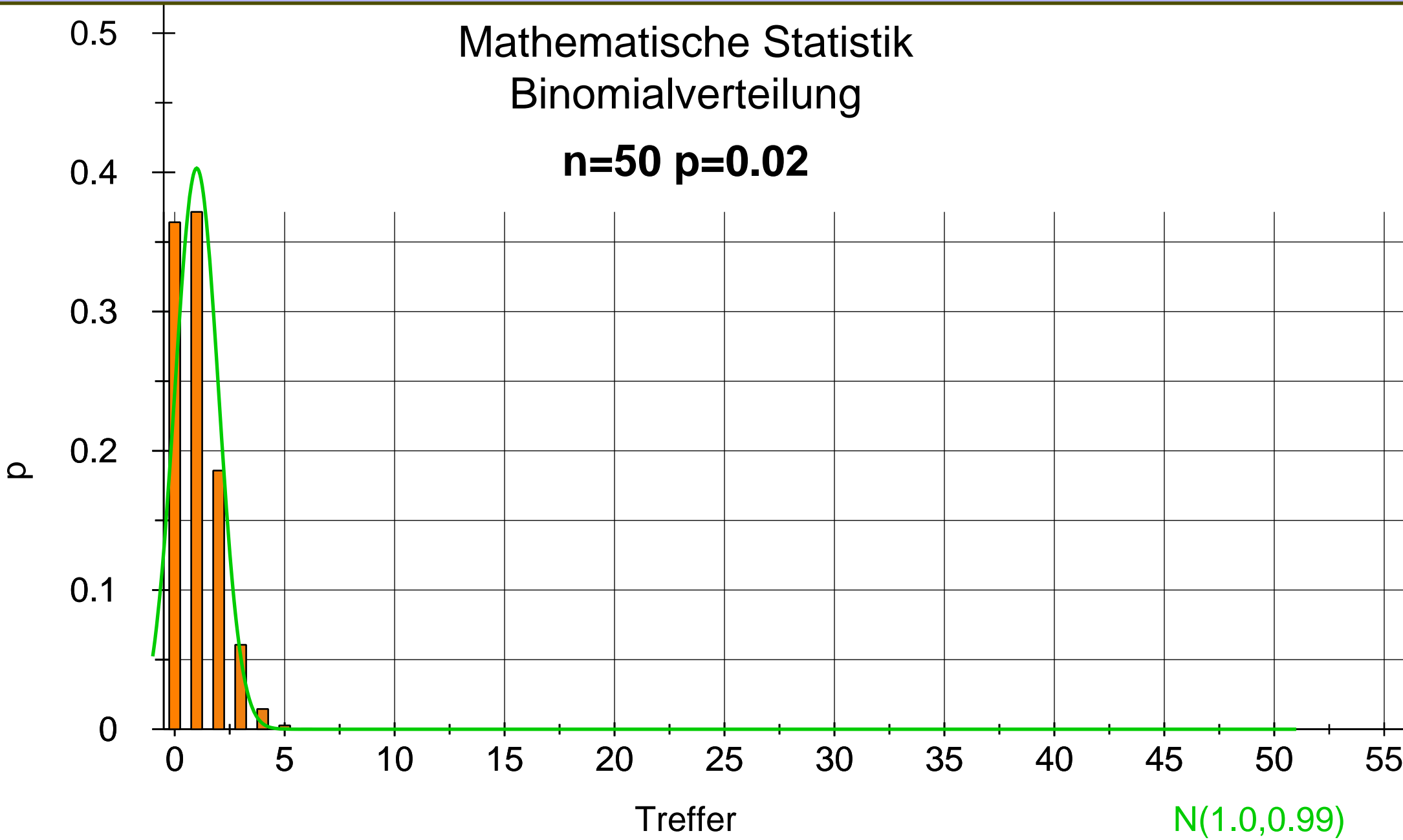


Mathematische Statistik
Binomialverteilung
n=50 p=0.01



Mathematische Statistik
Binomialverteilung

n=50 p=0.02

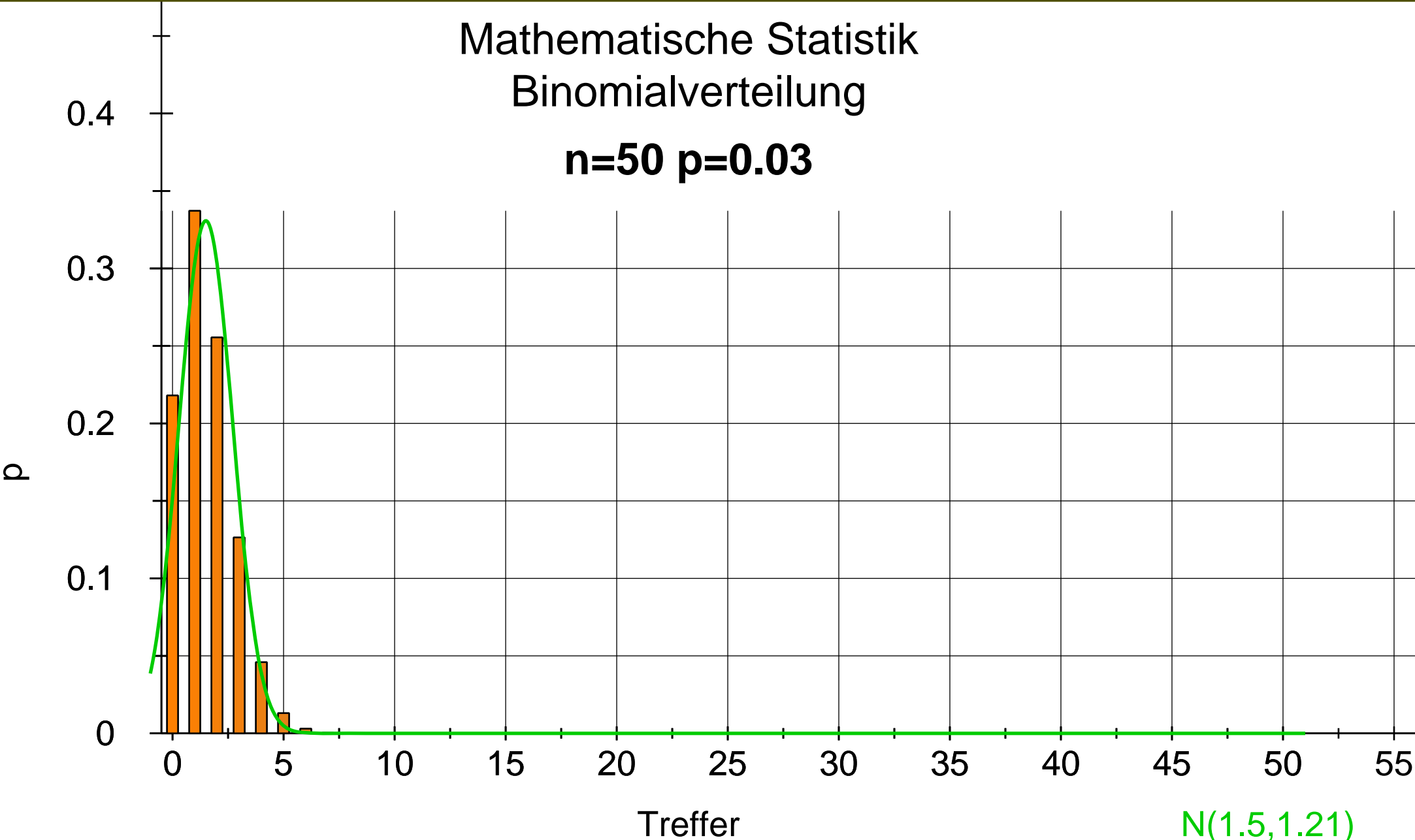


N(1.0, 0.99)

Mathematische Statistik

Binomialverteilung

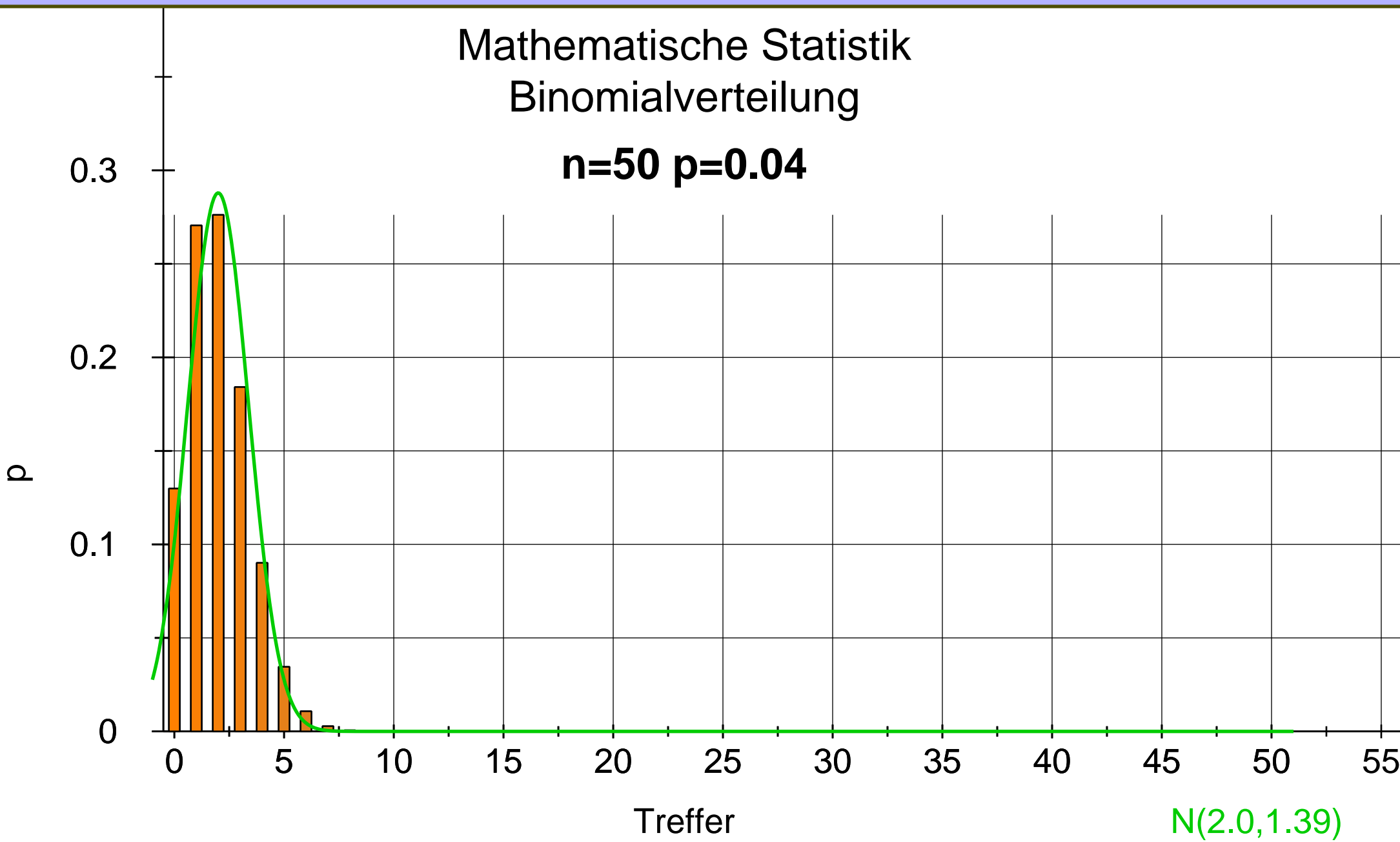
n=50 p=0.03



$N(1.5, 1.21)$

Mathematische Statistik
Binomialverteilung

n=50 p=0.04

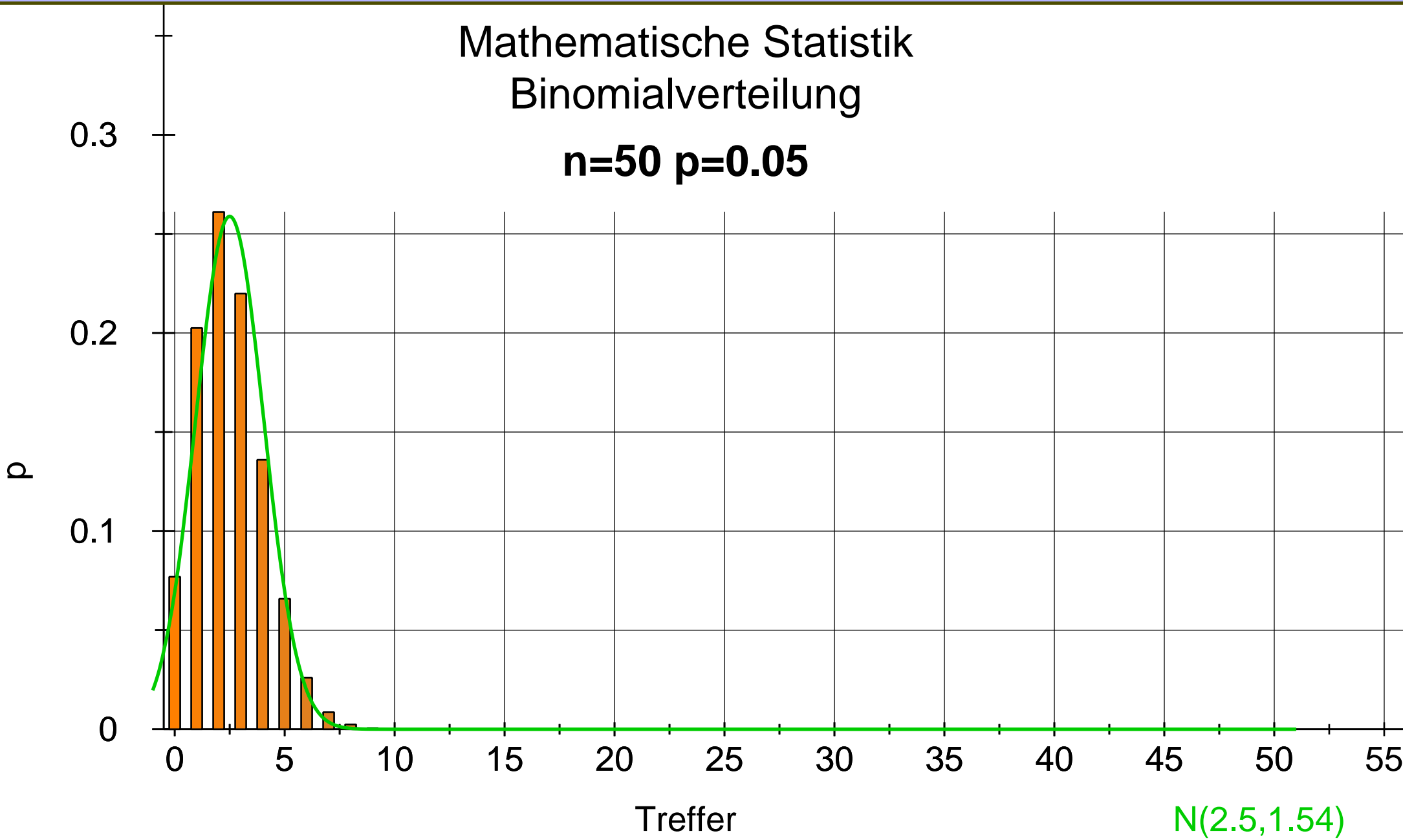


$N(2.0, 1.39)$

Mathematische Statistik

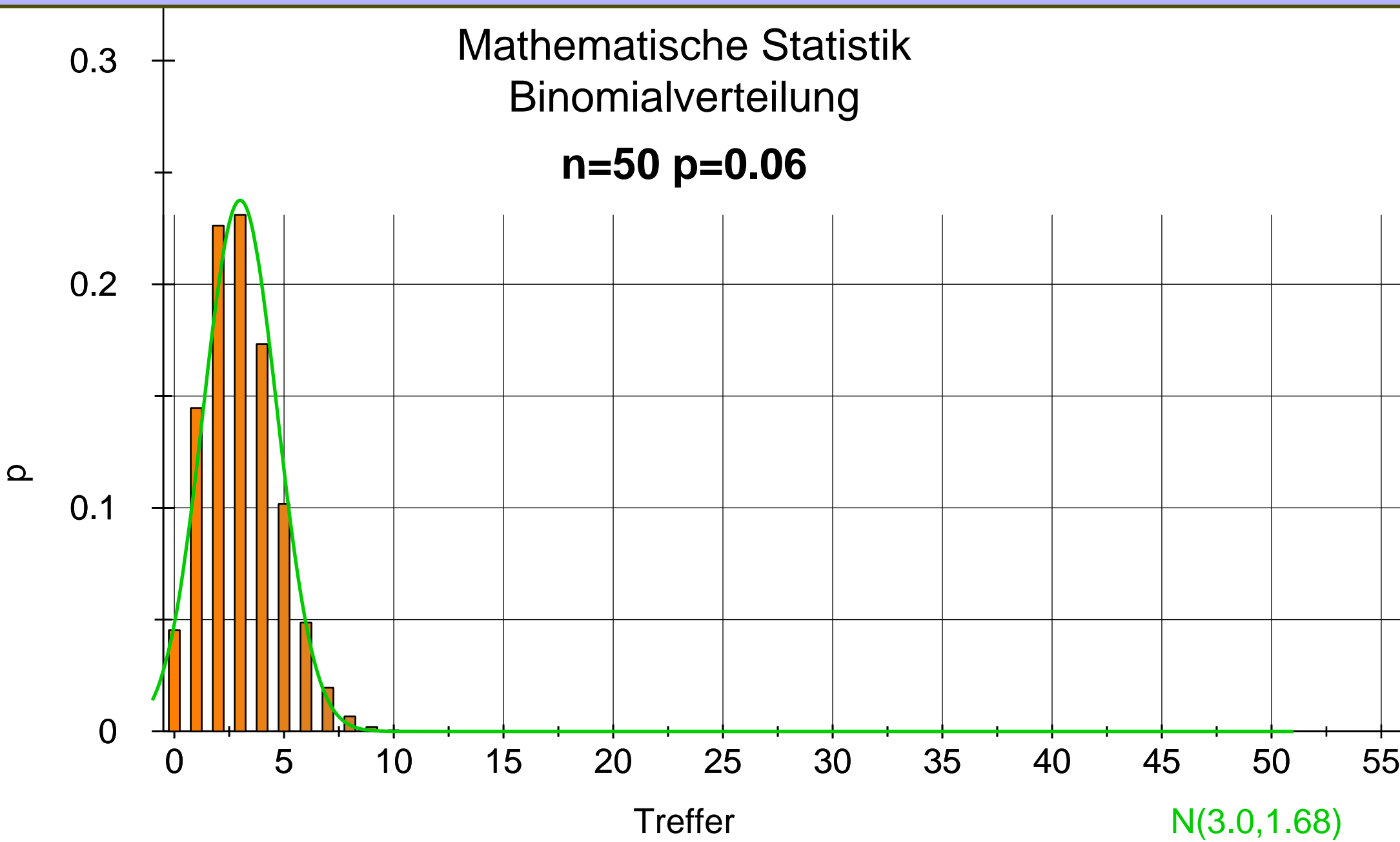
Binomialverteilung

n=50 p=0.05



Mathematische Statistik
Binomialverteilung

n=50 p=0.06

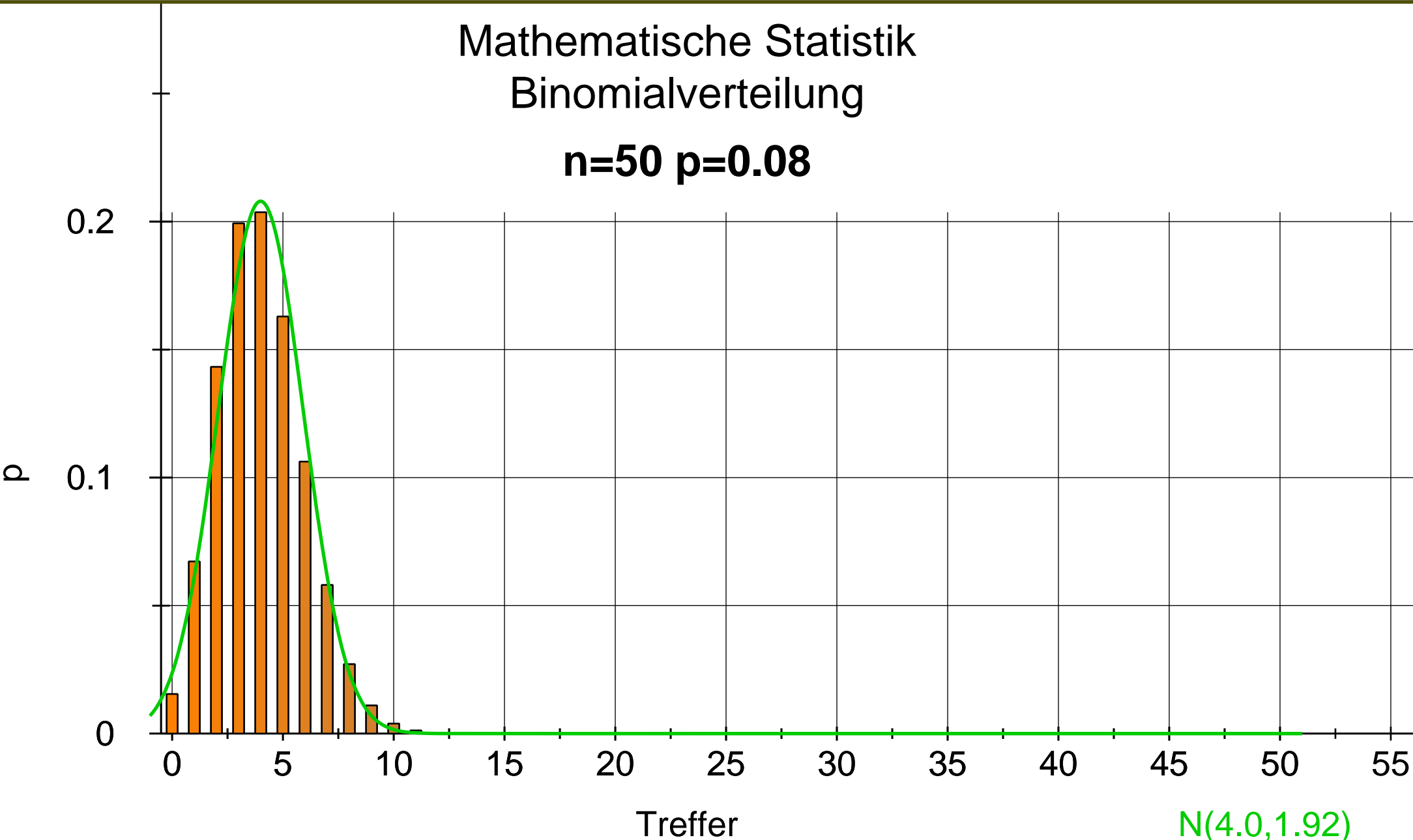


$N(3.0, 1.68)$

Mathematische Statistik

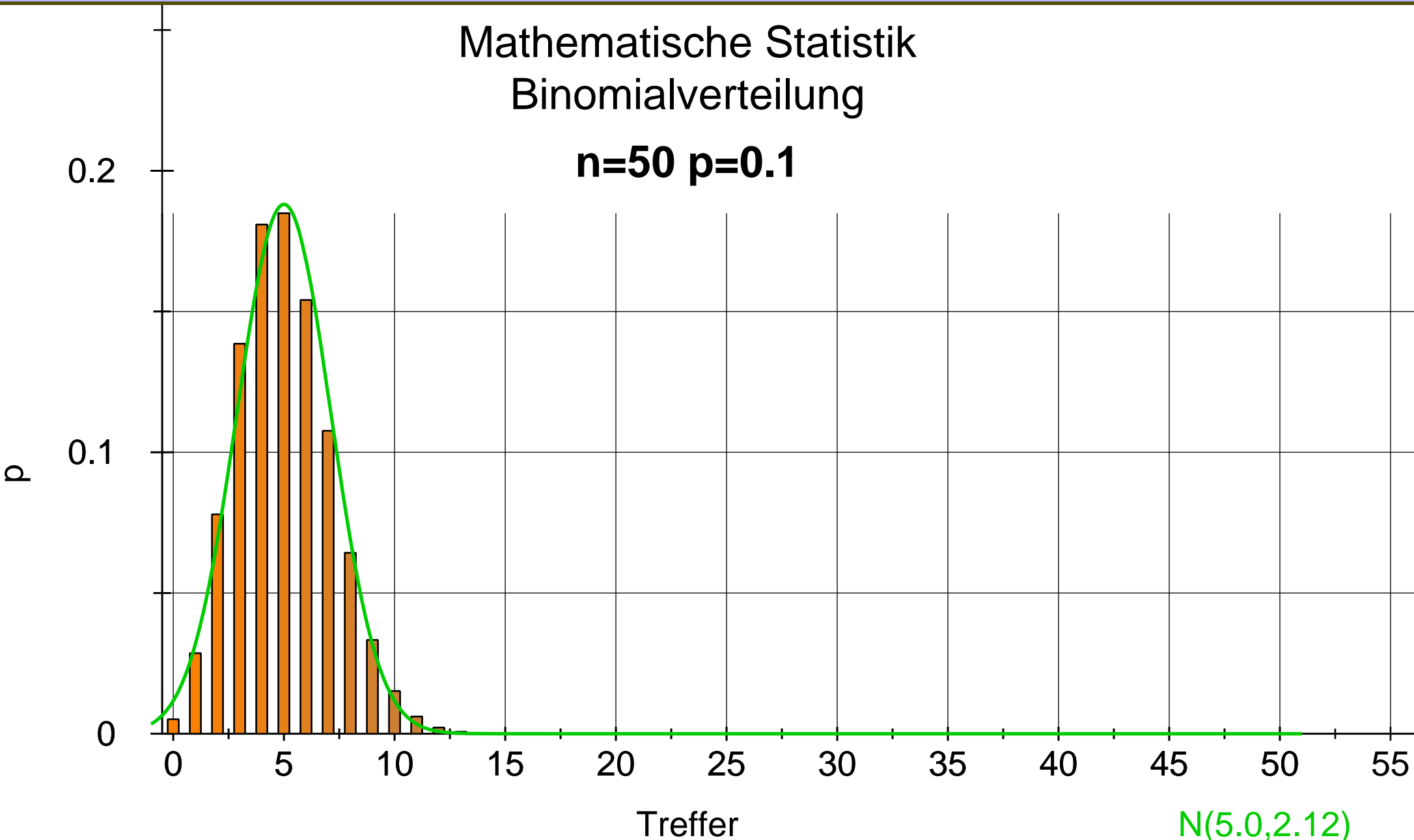
Binomialverteilung

n=50 p=0.08



Mathematische Statistik
Binomialverteilung

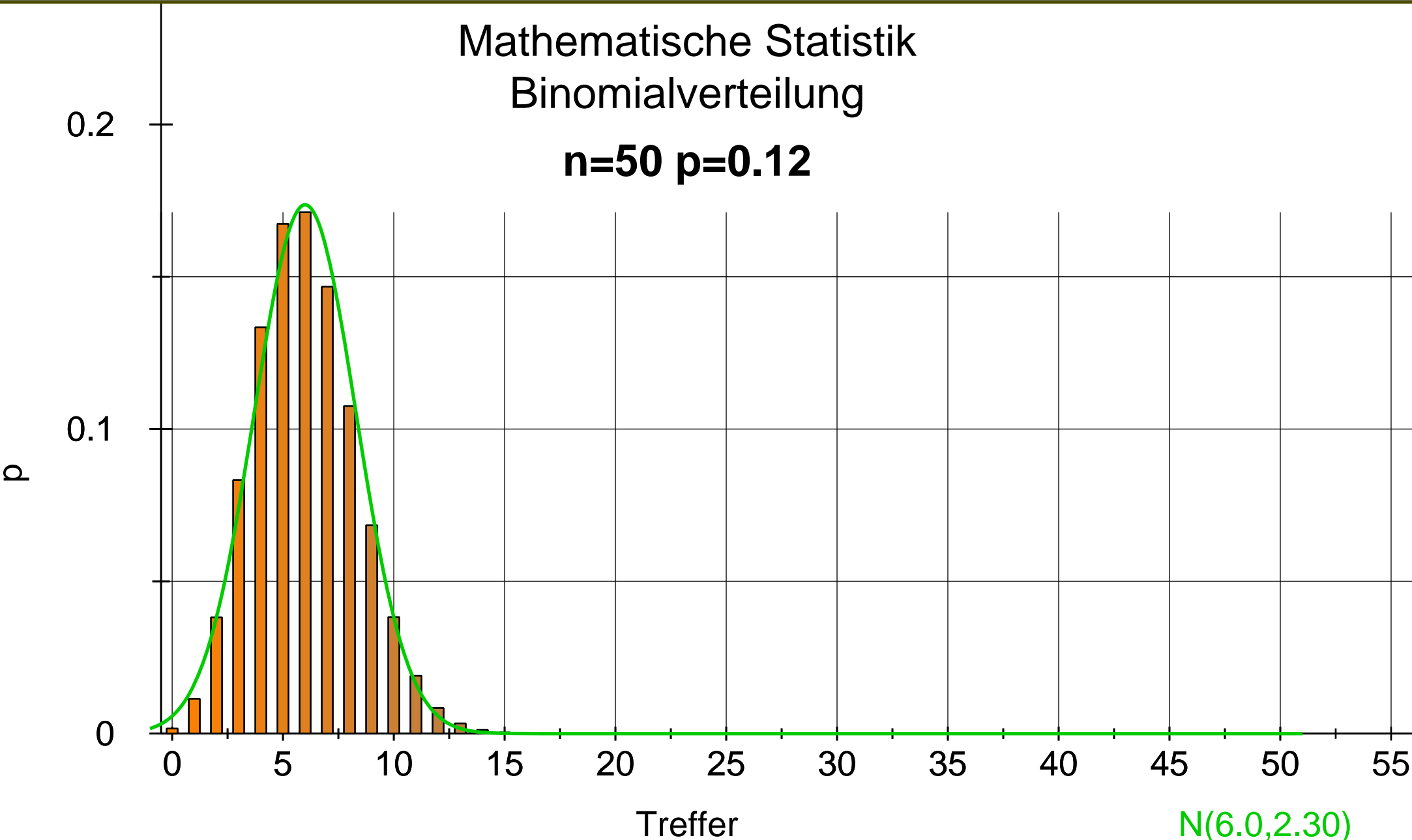
n=50 p=0.1



Mathematische Statistik

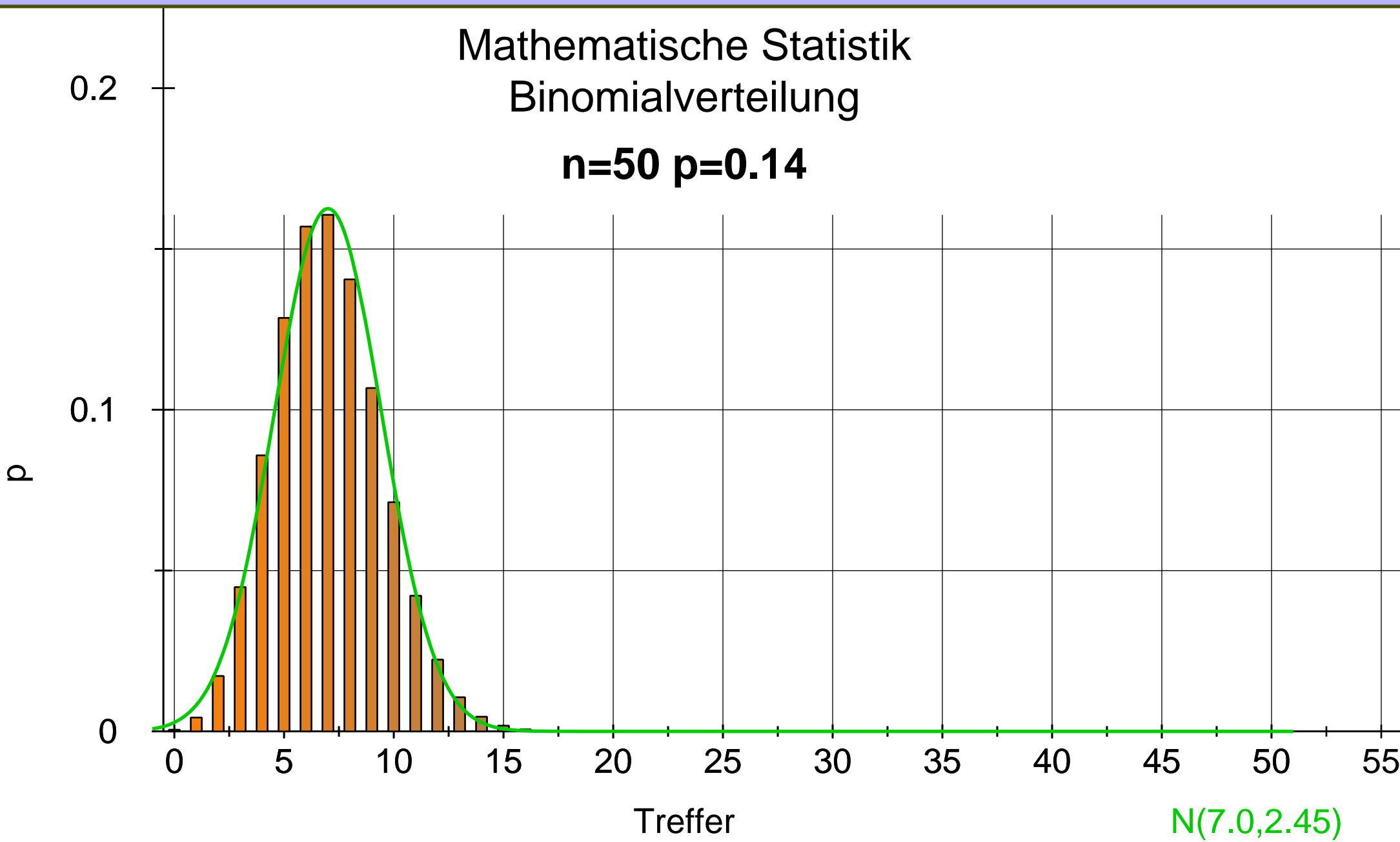
Binomialverteilung

n=50 p=0.12



Mathematische Statistik
Binomialverteilung

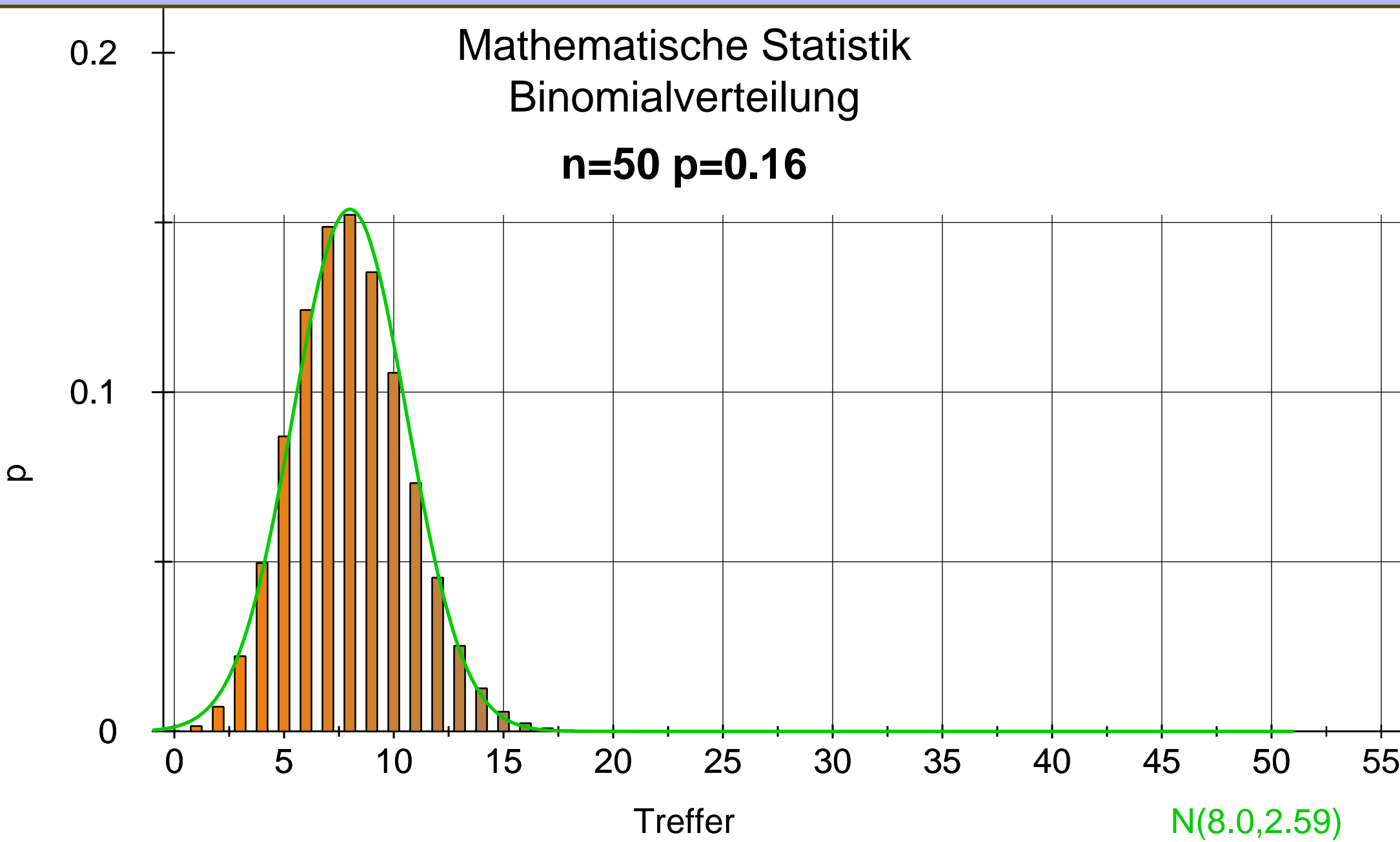
n=50 p=0.14



$N(7.0, 2.45)$

Mathematische Statistik
Binomialverteilung

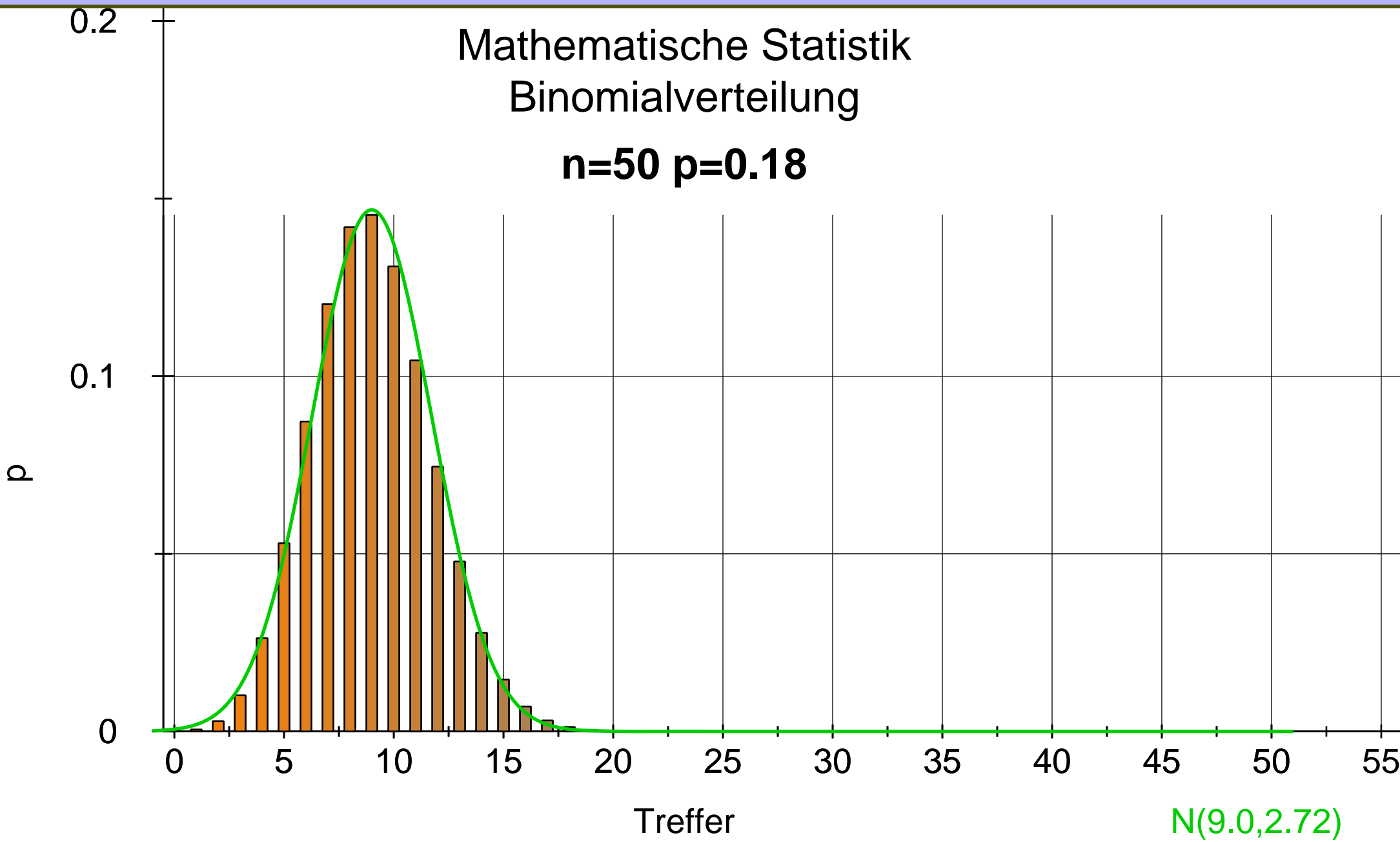
n=50 p=0.16



$N(8.0, 2.59)$

Mathematische Statistik
Binomialverteilung

n=50 p=0.18

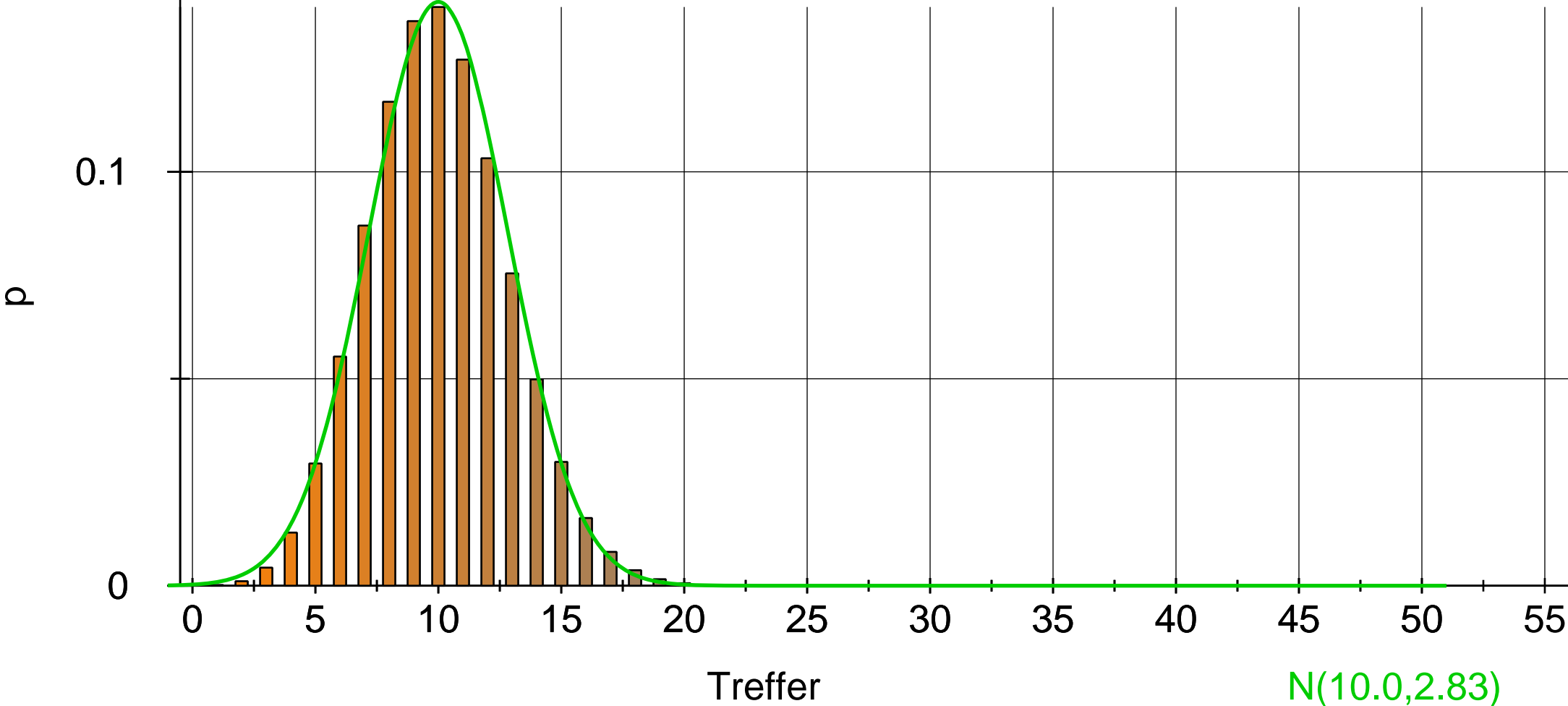


N(9.0, 2.72)

Mathematische Statistik

Binomialverteilung

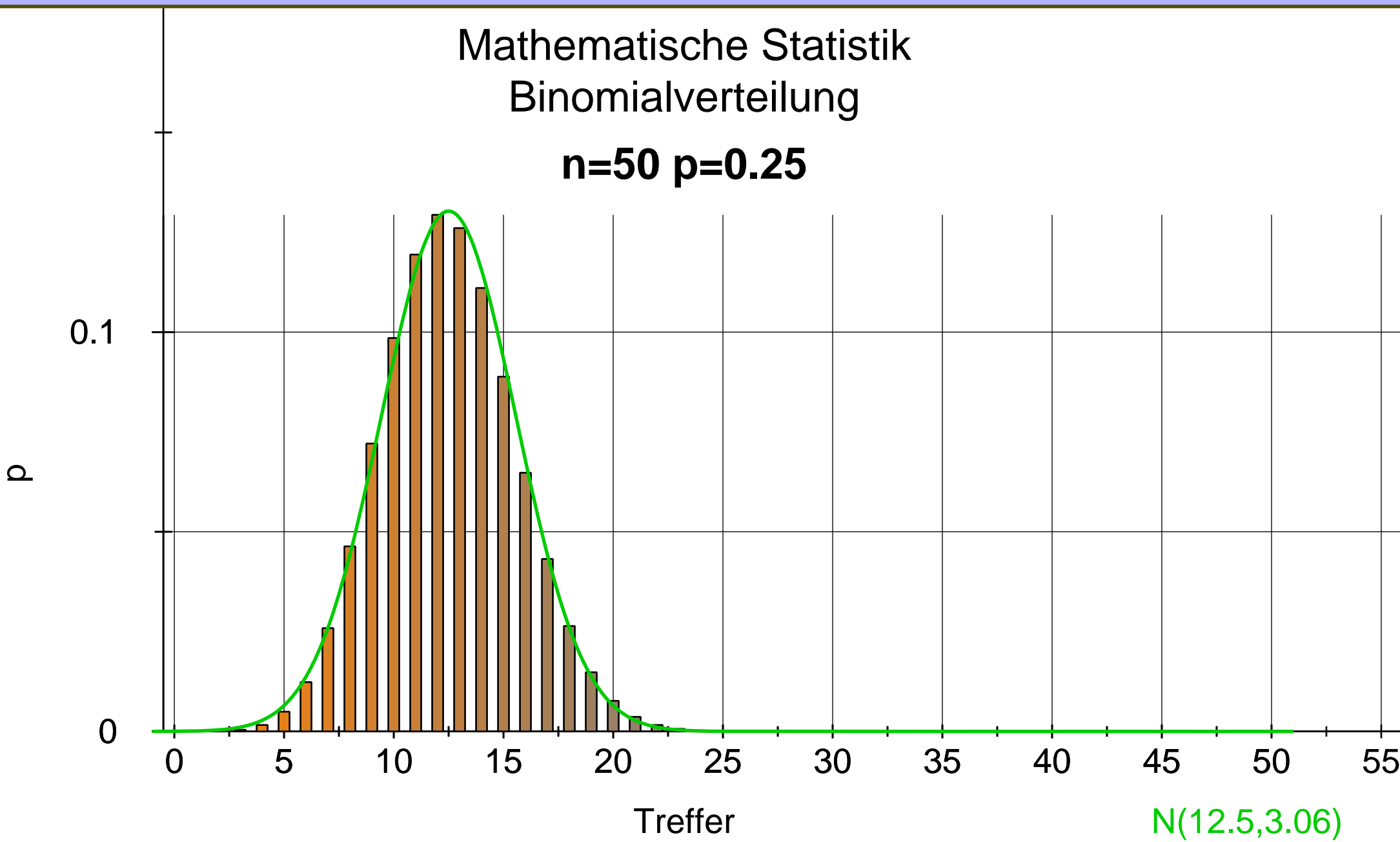
n=50 p=0.2



Mathematische Statistik

Binomialverteilung

n=50 p=0.25



$N(12.5, 3.06)$

Mathematische Statistik

Binomialverteilung

n=50 p=0.3

p

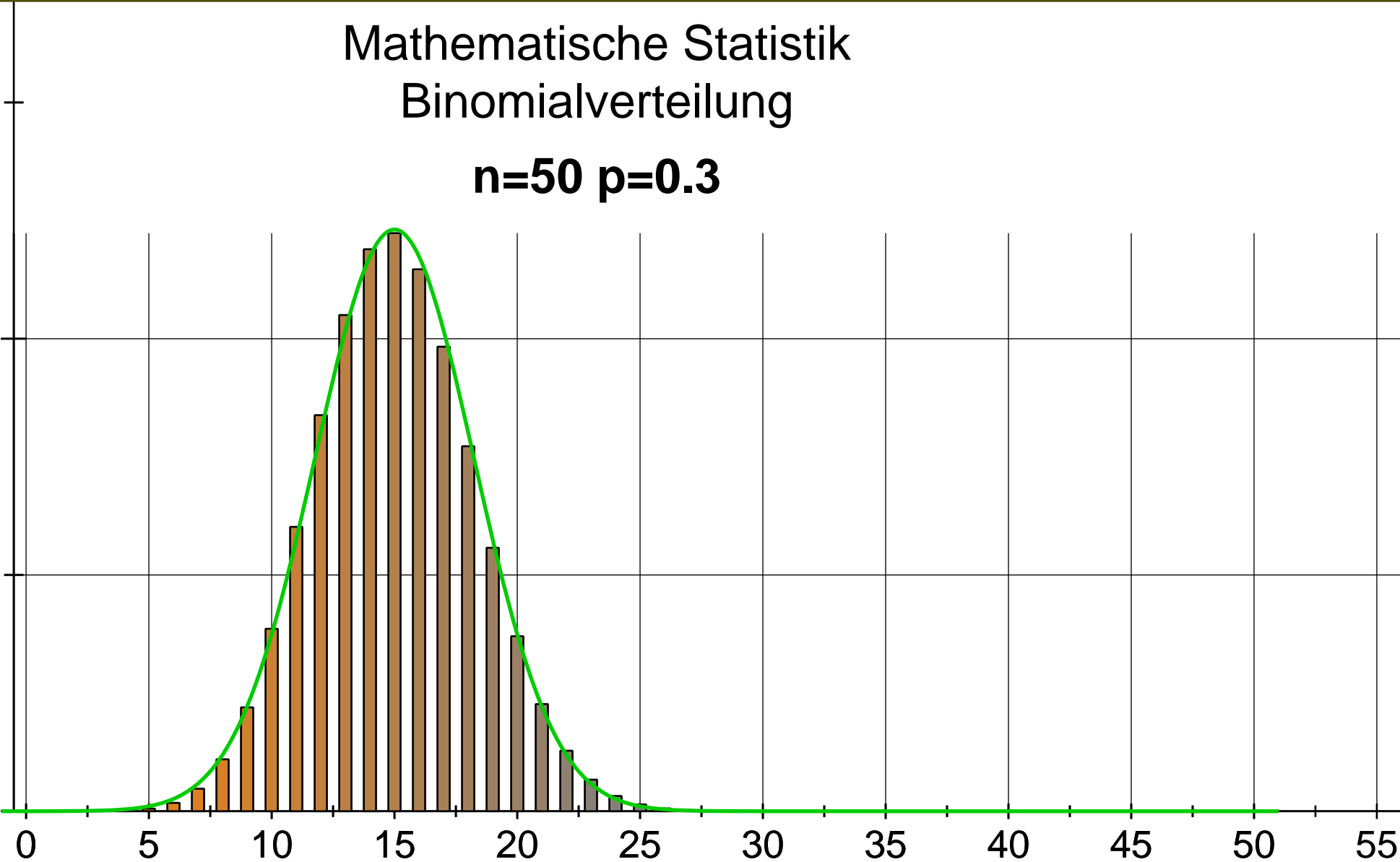
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(15.0, 3.24)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.32

p

0.1

0

0

5

10

15

20

25

30

35

40

45

50

55

Treffer

$N(16.0, 3.30)$

Mathematische Statistik

Binomialverteilung

n=50 p=0.34

p

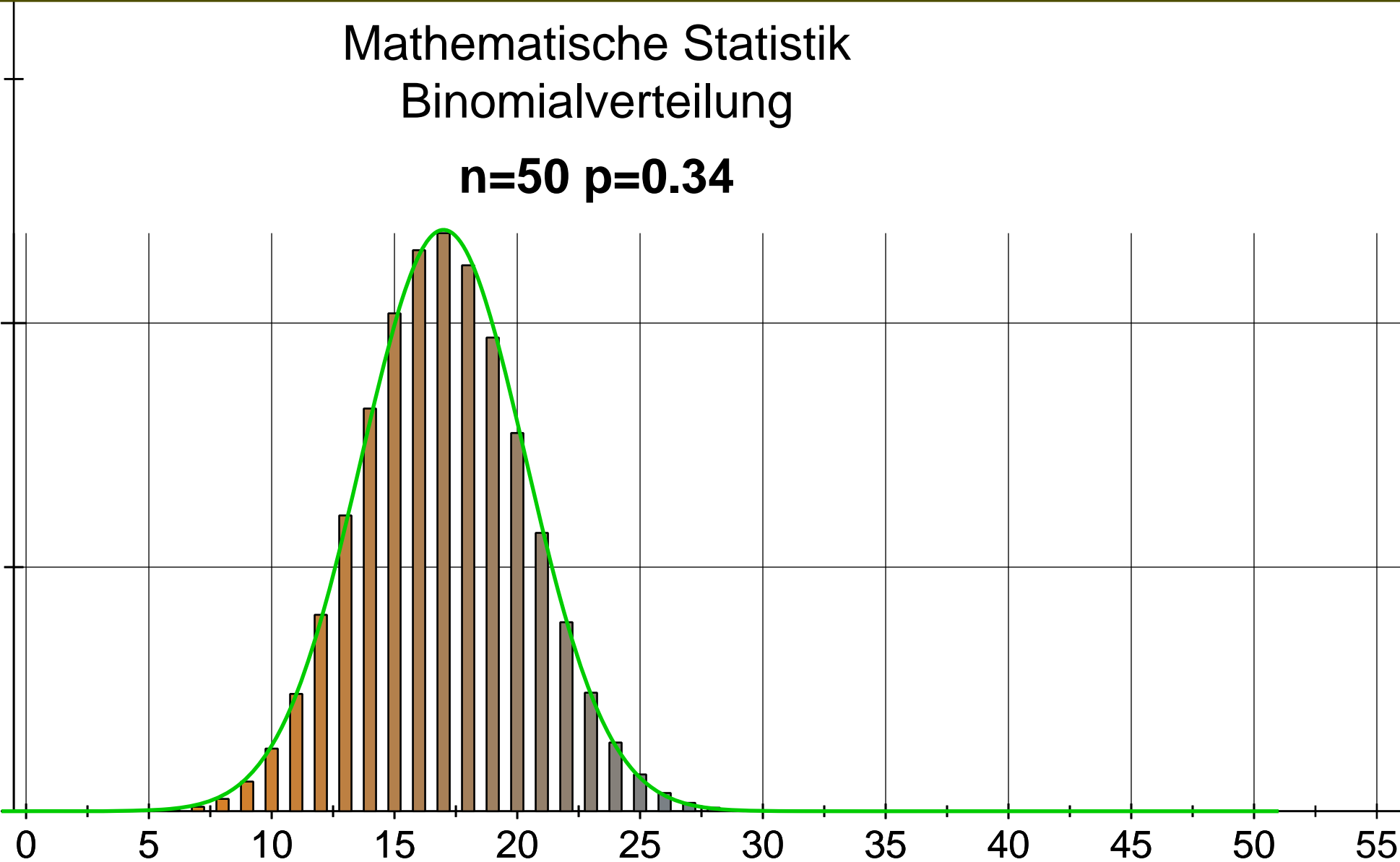
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

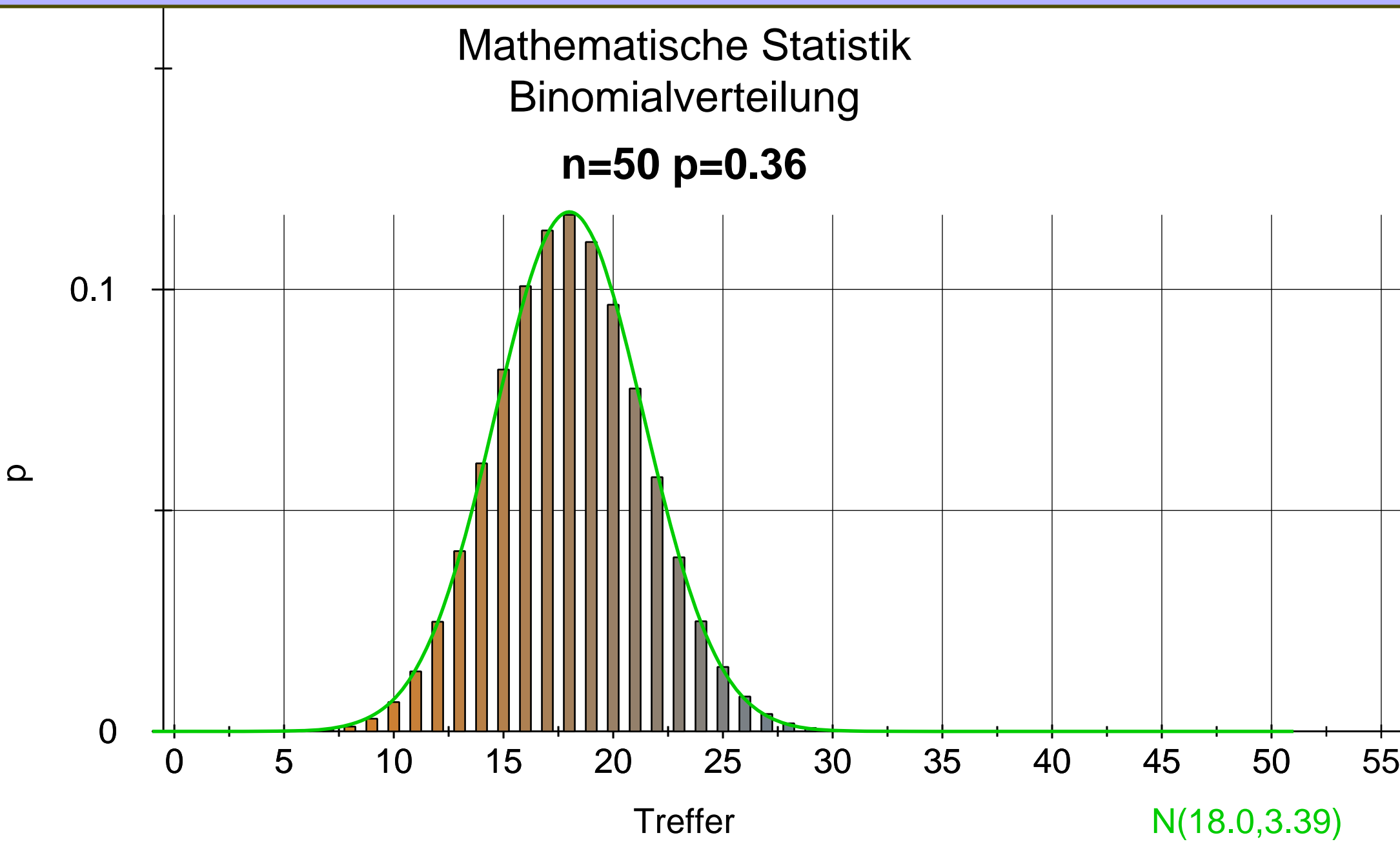
$N(17.0, 3.35)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.36



Mathematische Statistik

Binomialverteilung

n=50 p=0.38

p

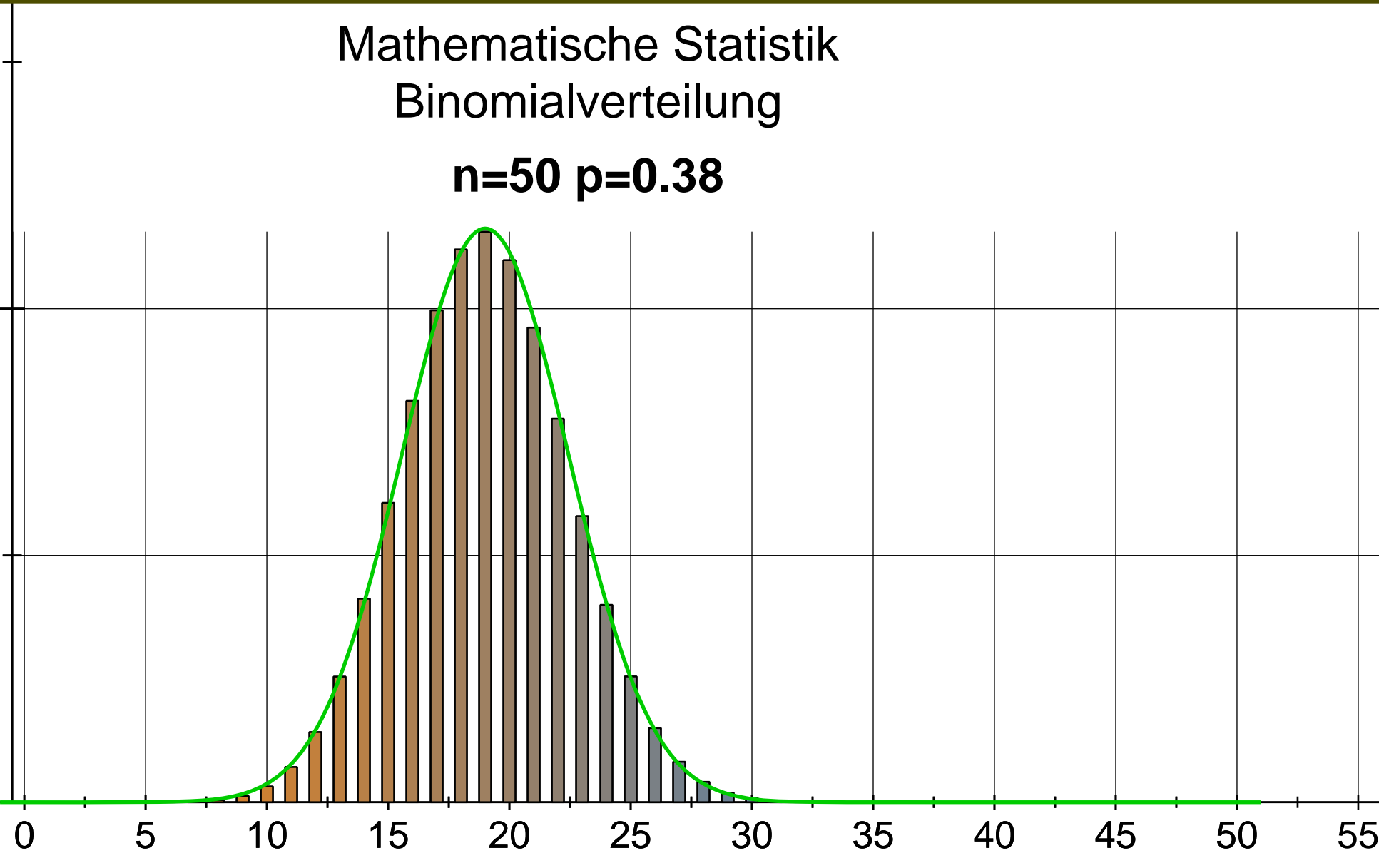
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(19.0, 3.43)$



Mathematische Statistik
Binomialverteilung

n=50 p=0.4

p

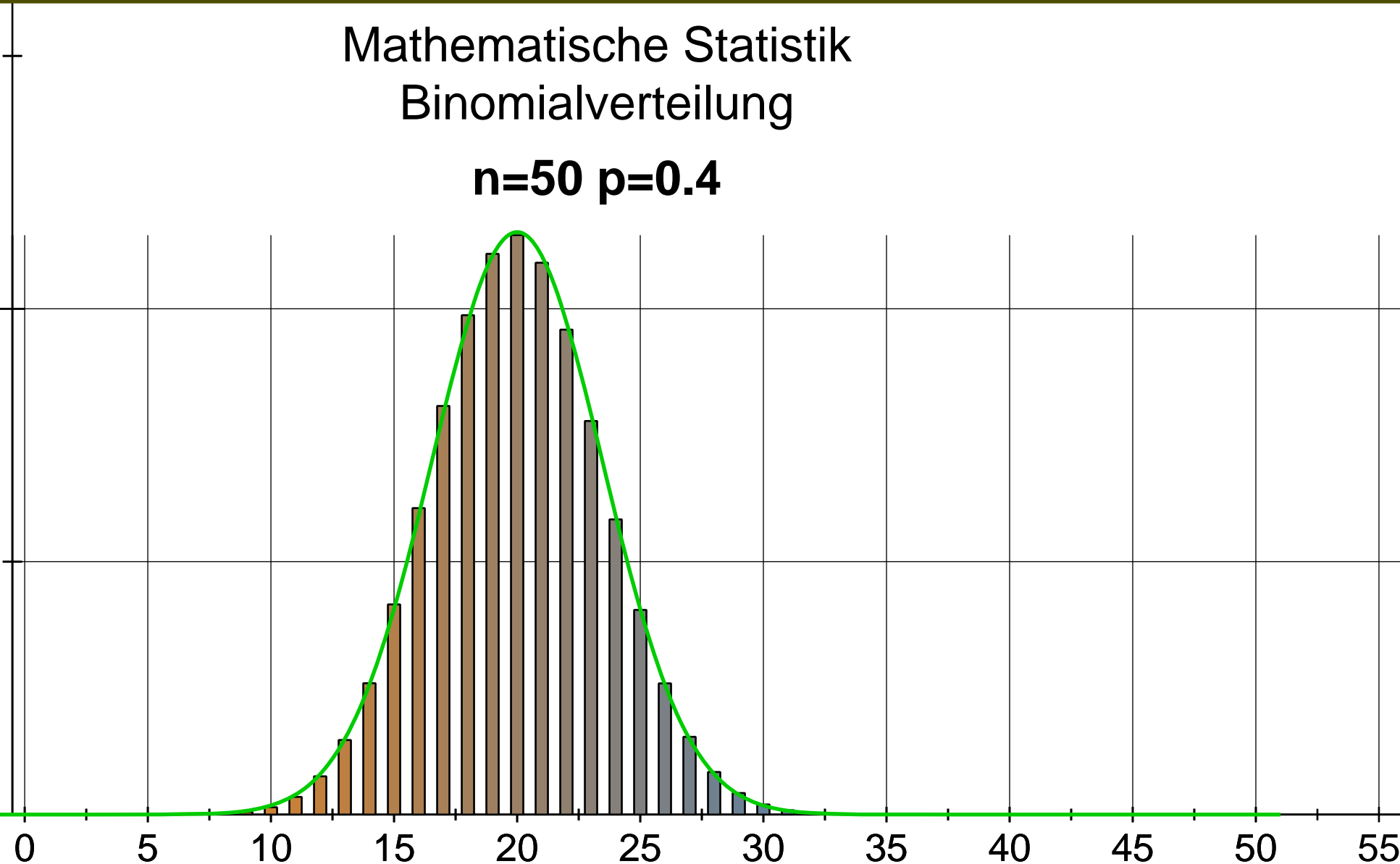
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

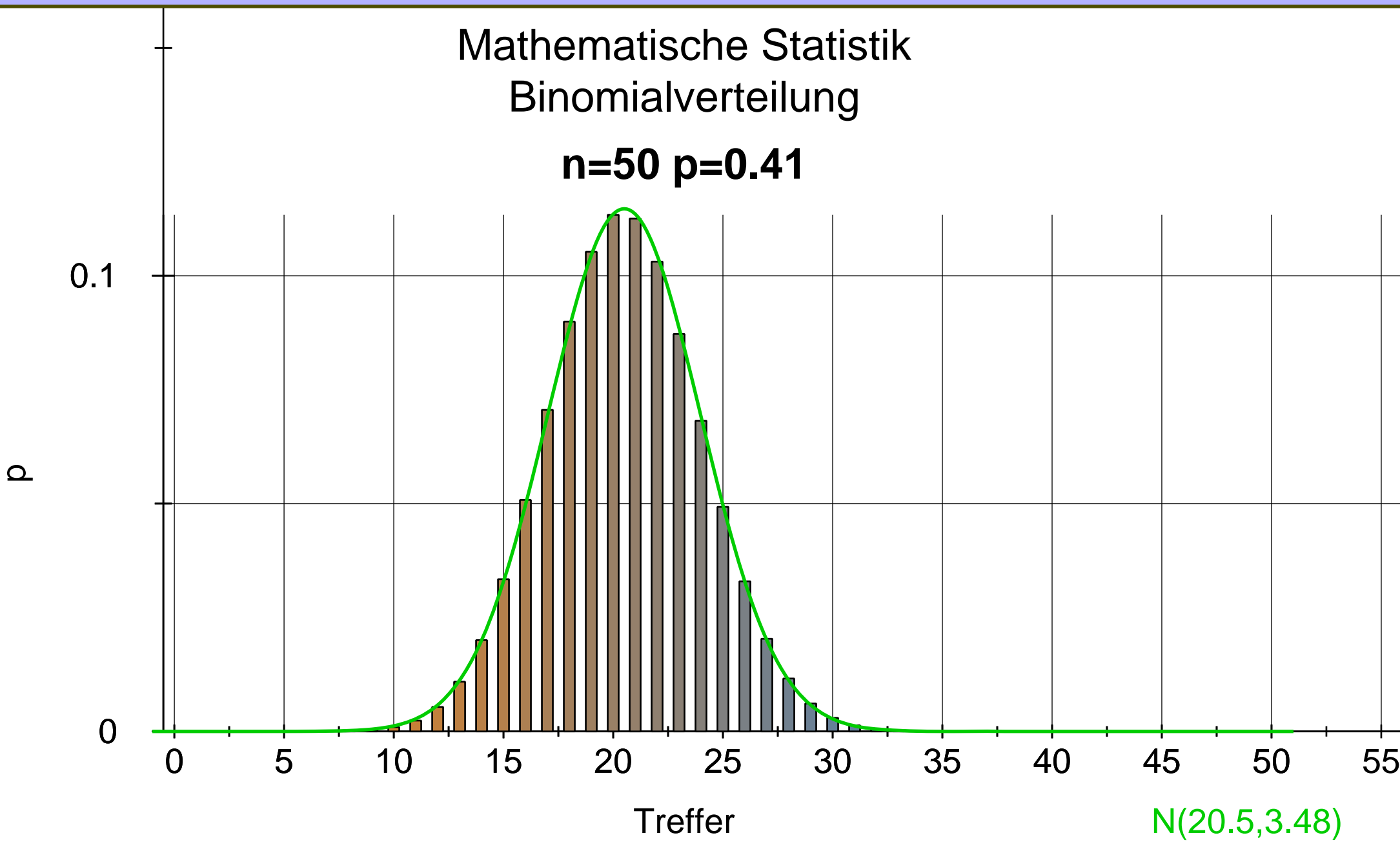
$N(20.0, 3.46)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.41

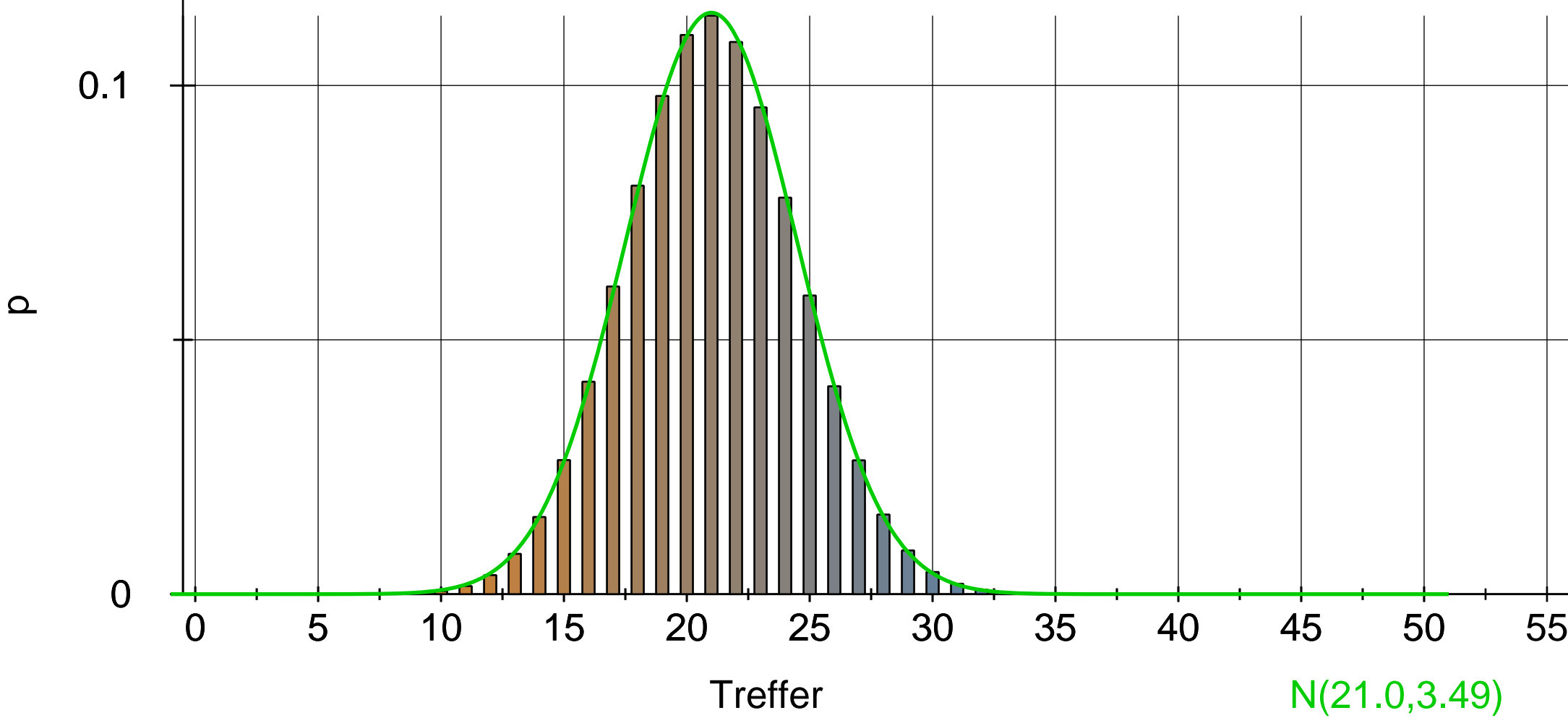


$N(20.5, 3.48)$

Mathematische Statistik

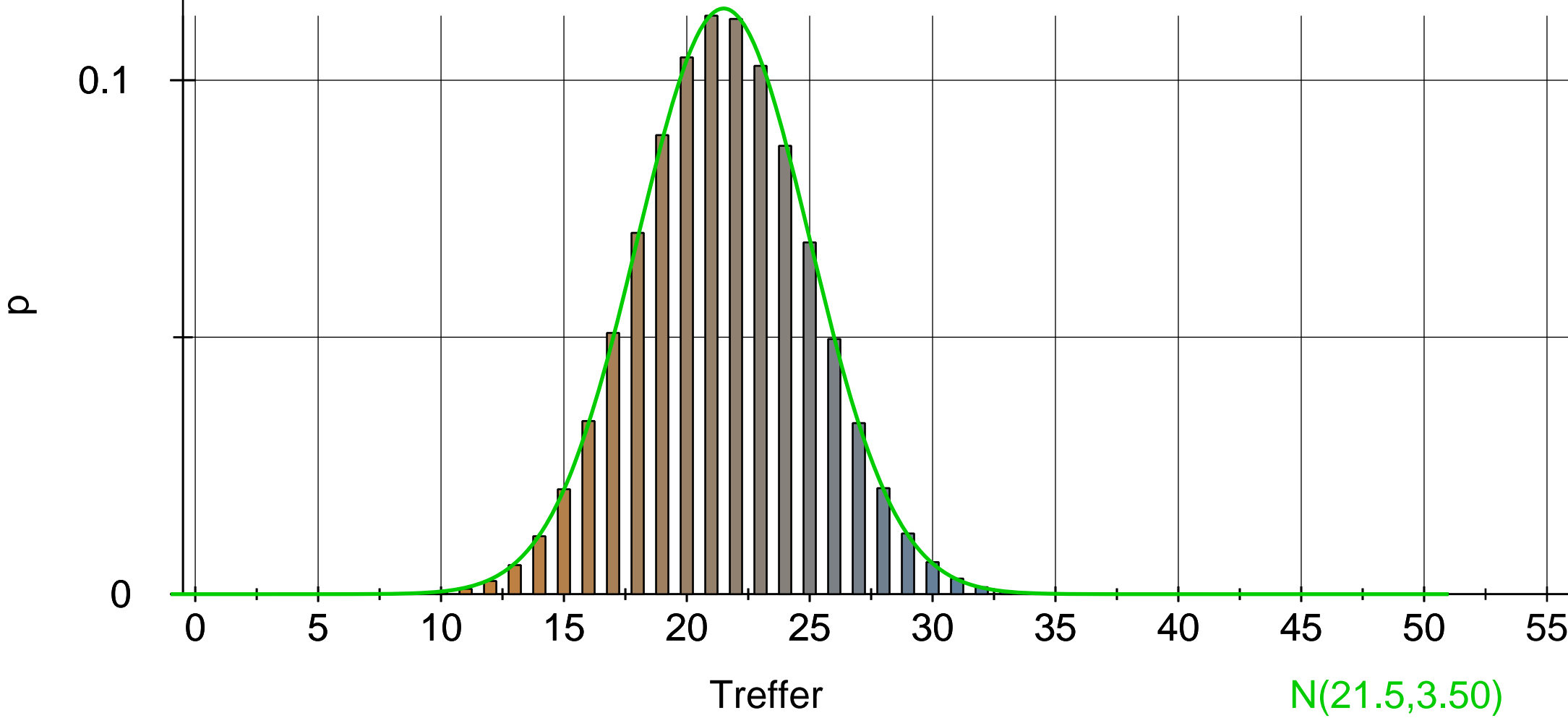
Binomialverteilung

n=50 p=0.42



Mathematische Statistik Binomialverteilung

n=50 p=0.43



Mathematische Statistik

Binomialverteilung

n=50 p=0.44

p

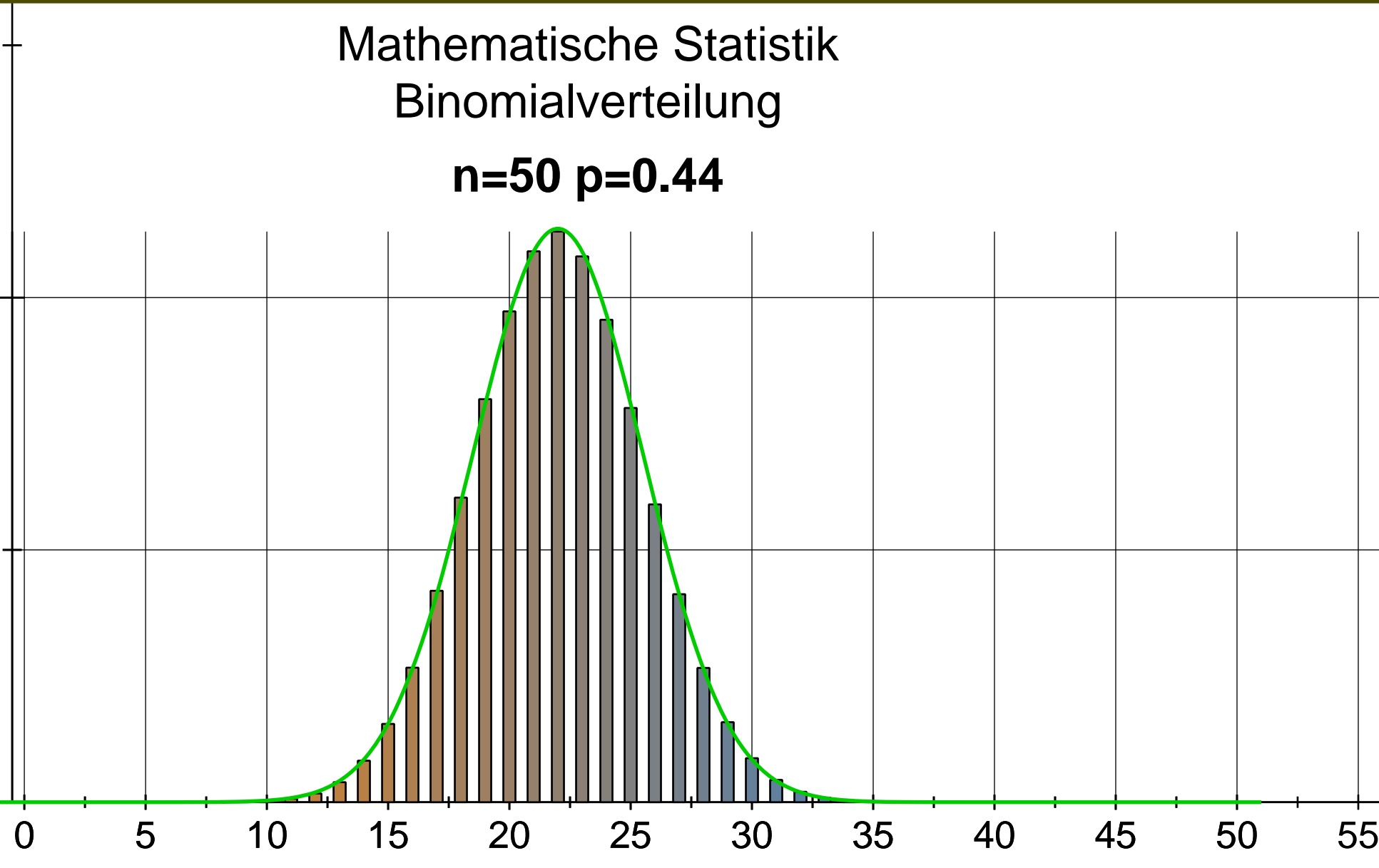
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(22.0, 3.51)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.45

p

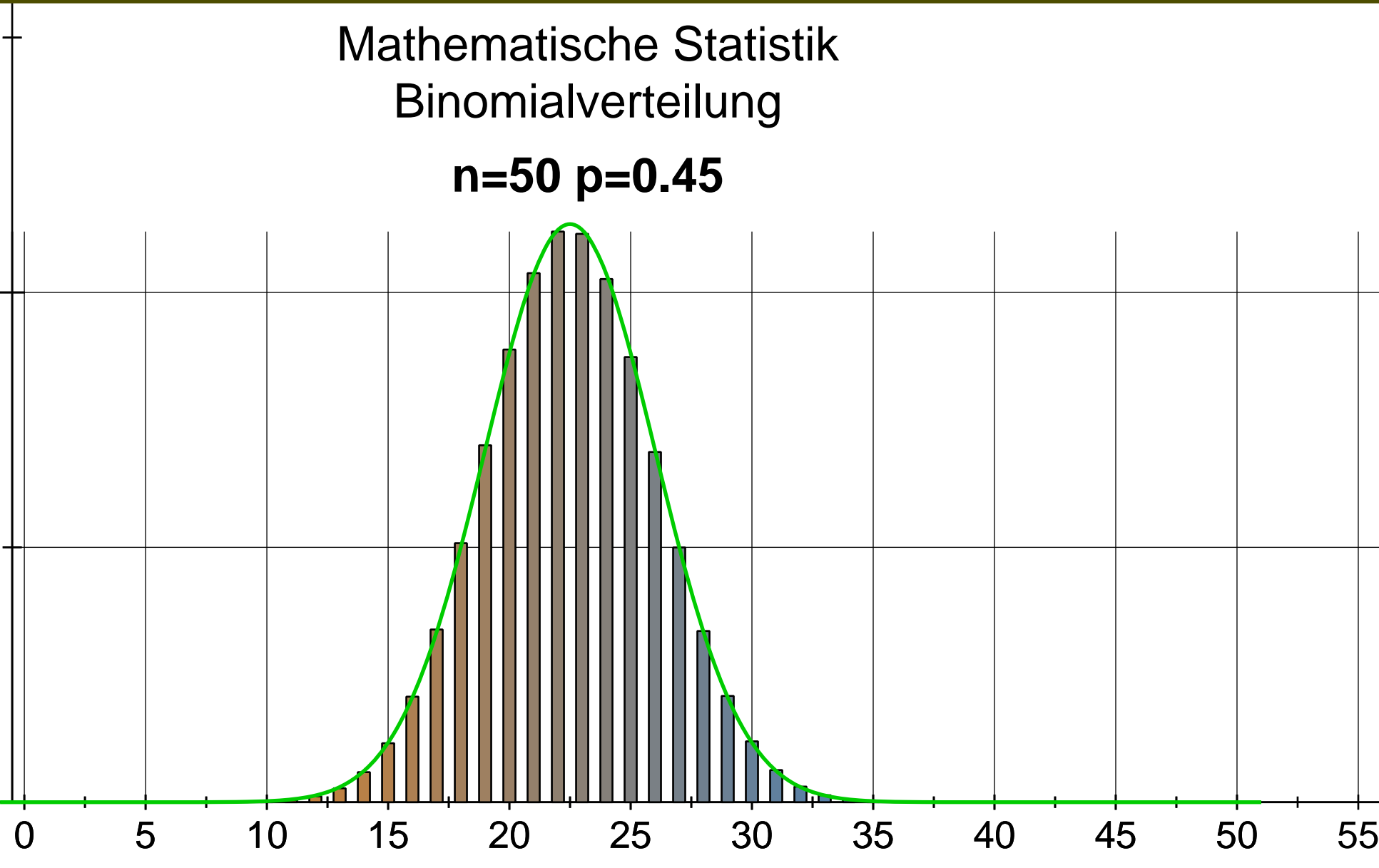
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(22.5, 3.52)$



Mathematische Statistik Binomialverteilung

n=50 p=0.46

p

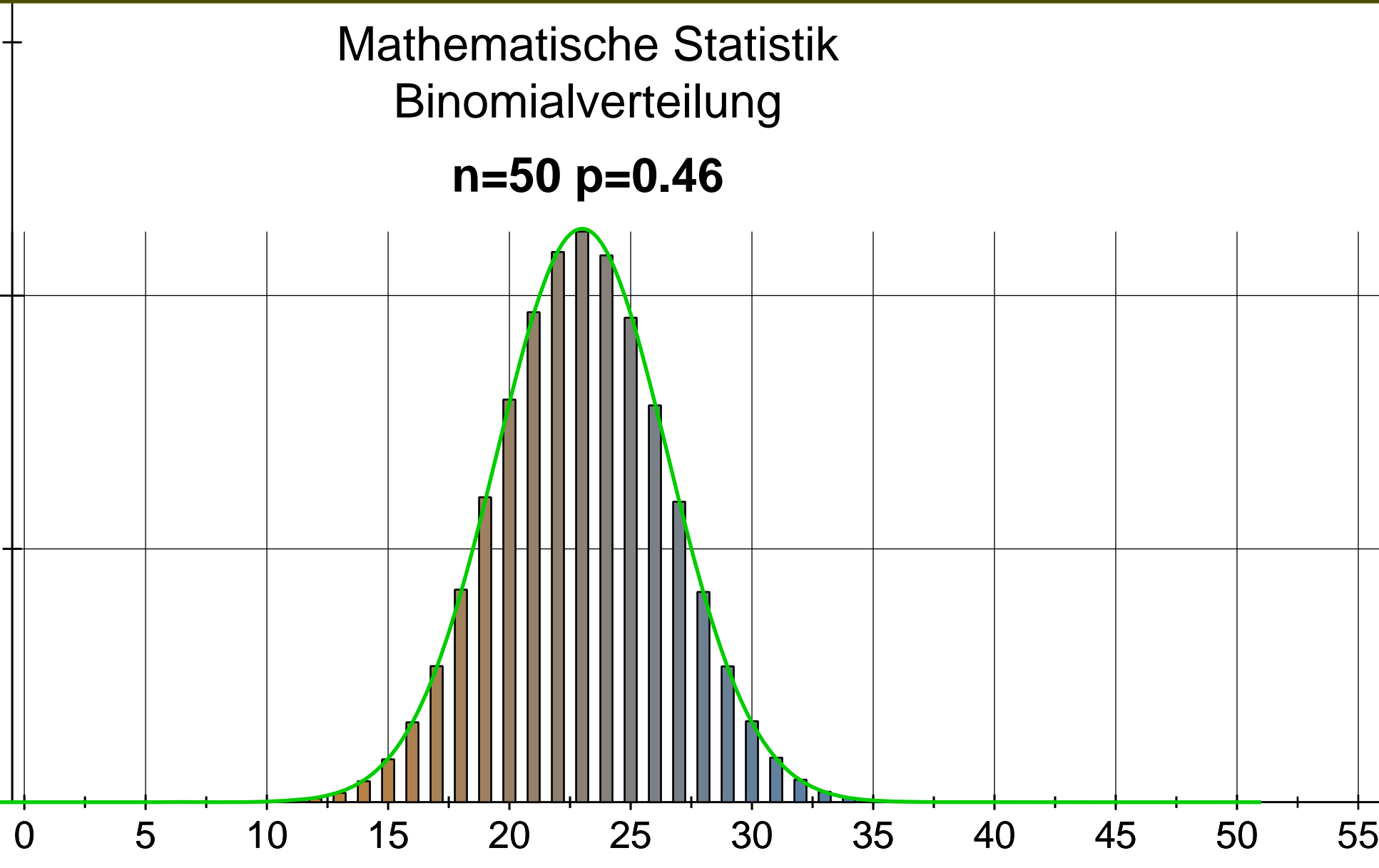
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(23.0, 3.52)$



Mathematische Statistik

Binomialverteilung

$n=50$ $p=0.47$

p

0.1

0

0

5

10

15

20

25

30

35

40

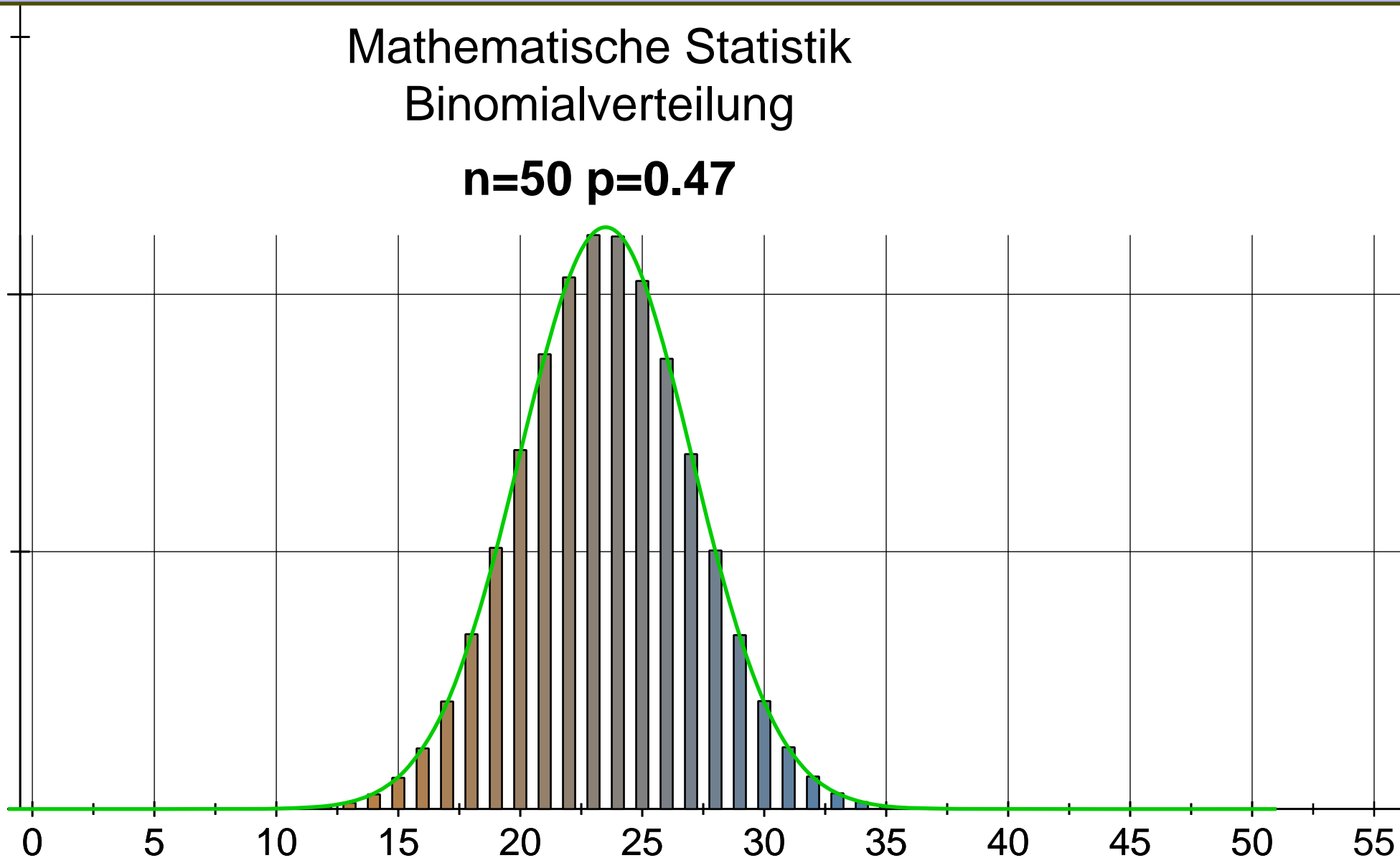
45

50

55

Treffer

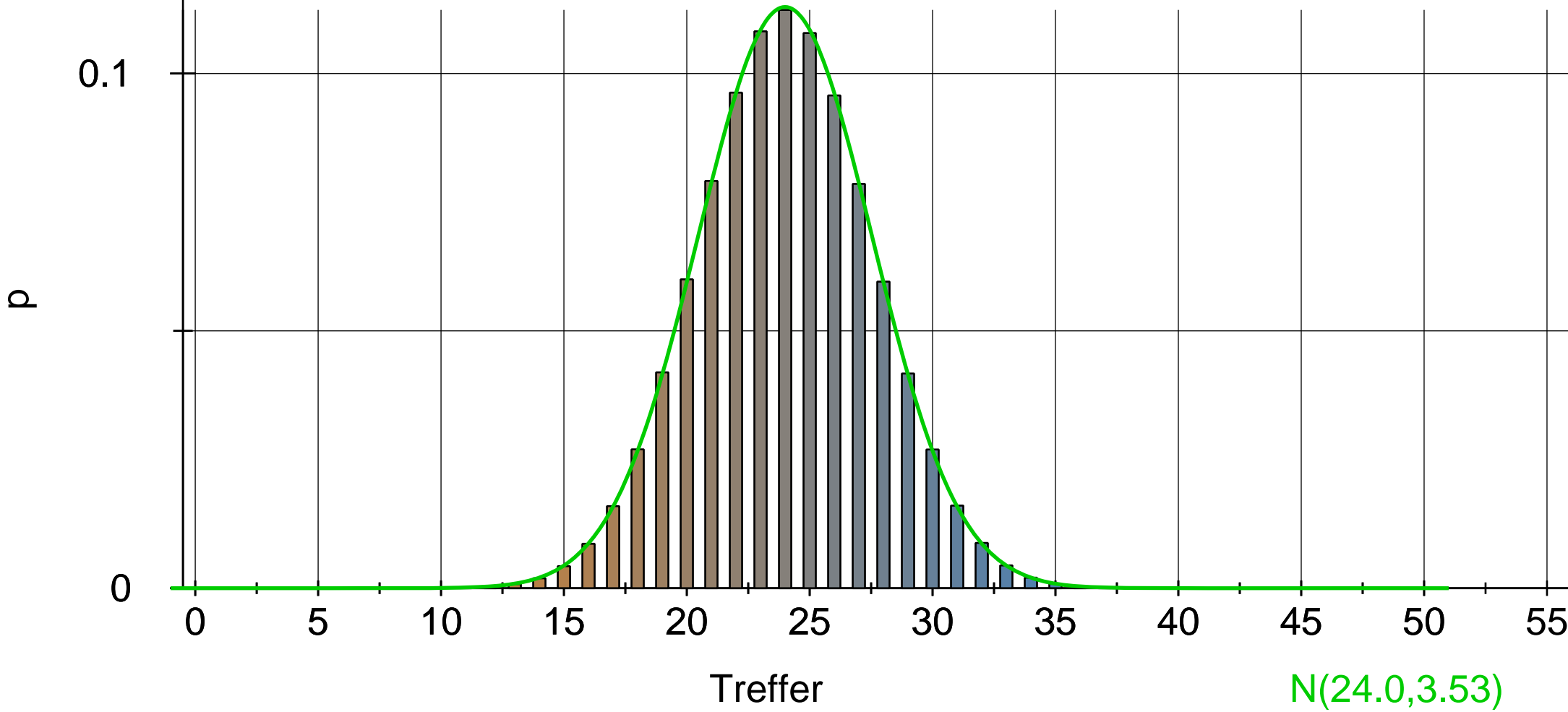
$N(23.5, 3.53)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.48



Mathematische Statistik

Binomialverteilung

n=50 p=0.49

p

0.1

0

0

5

10

15

20

25

30

35

40

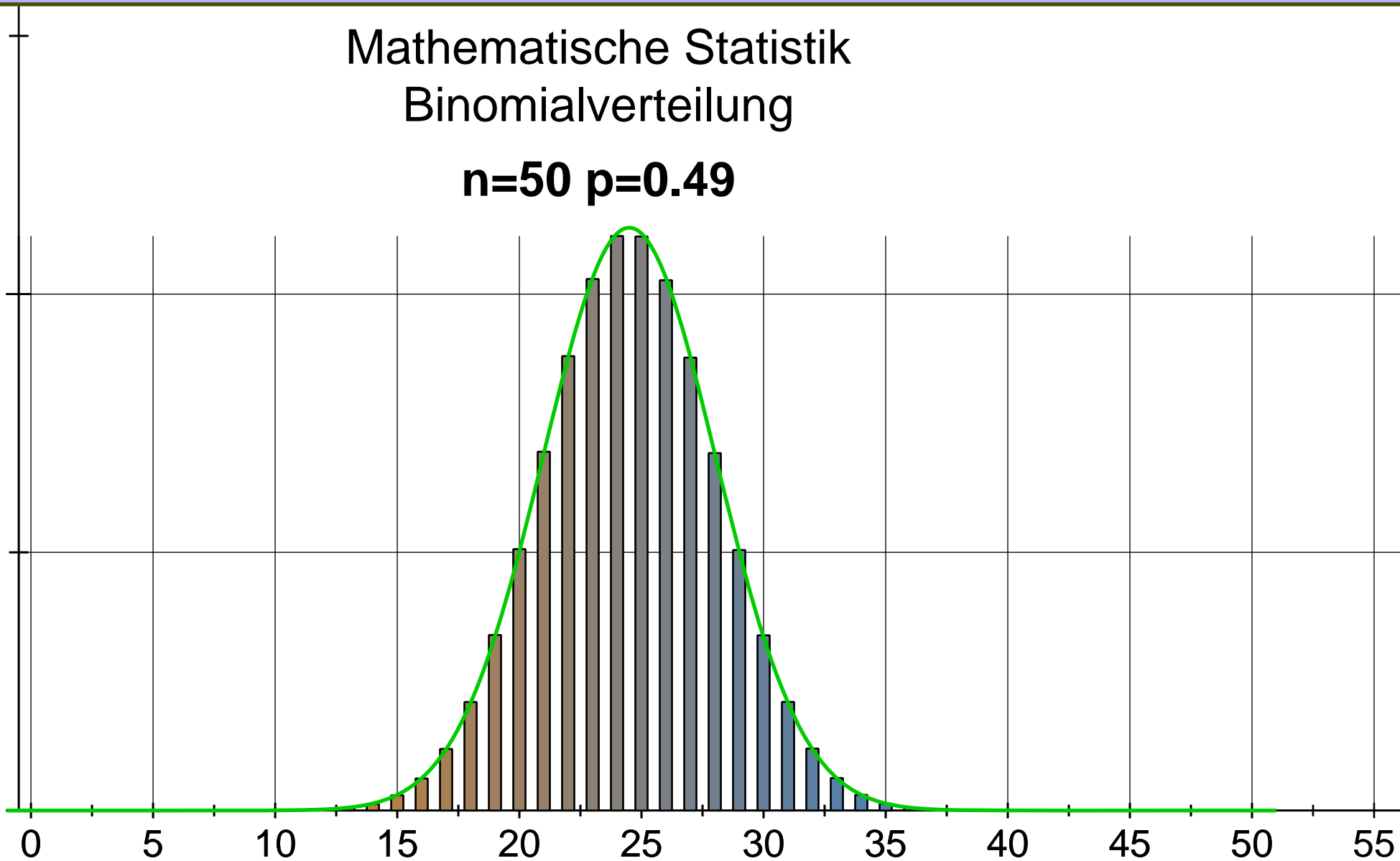
45

50

55

Treffer

$N(24.5, 3.53)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.49

p

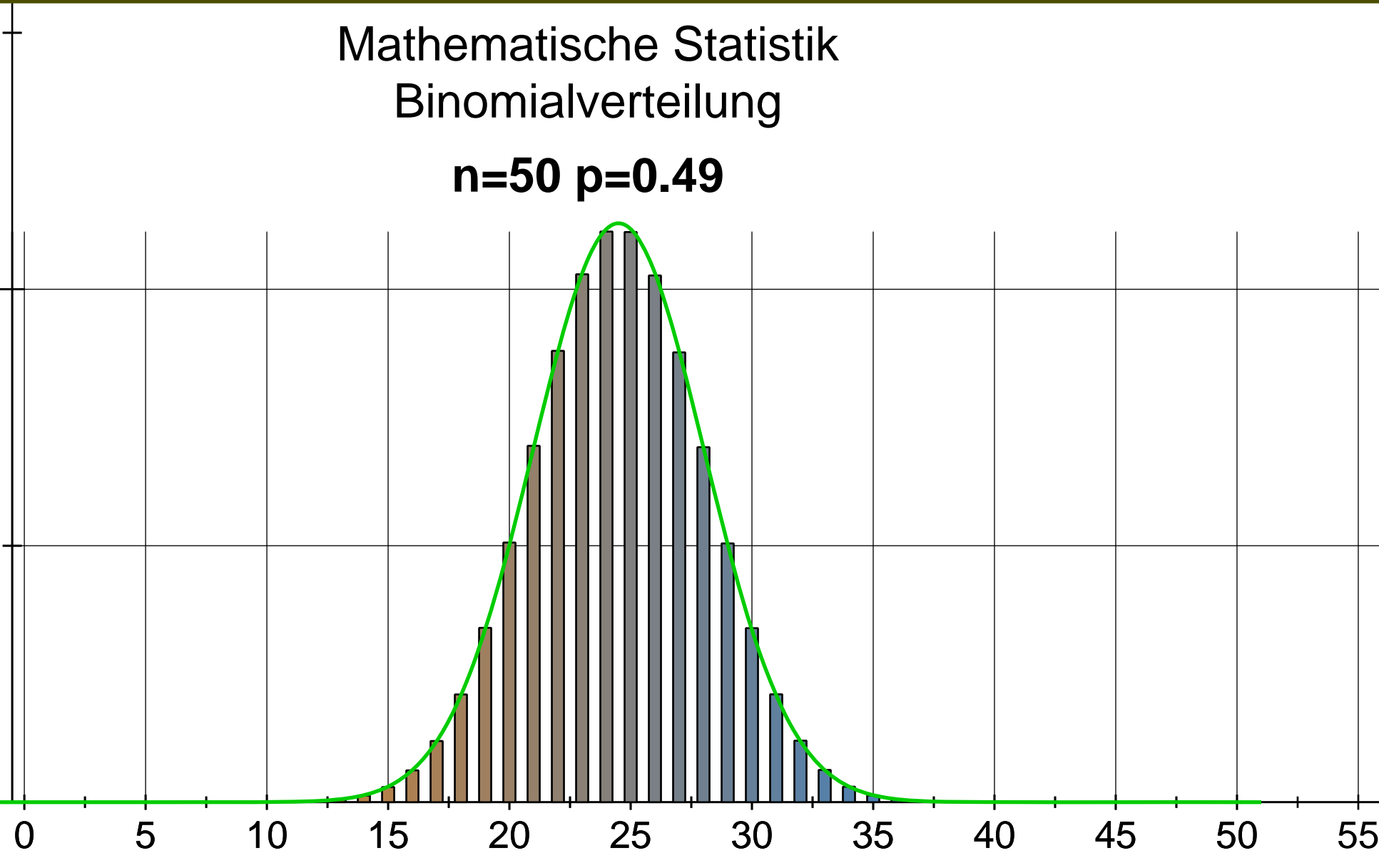
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(24.5, 3.53)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.5

p

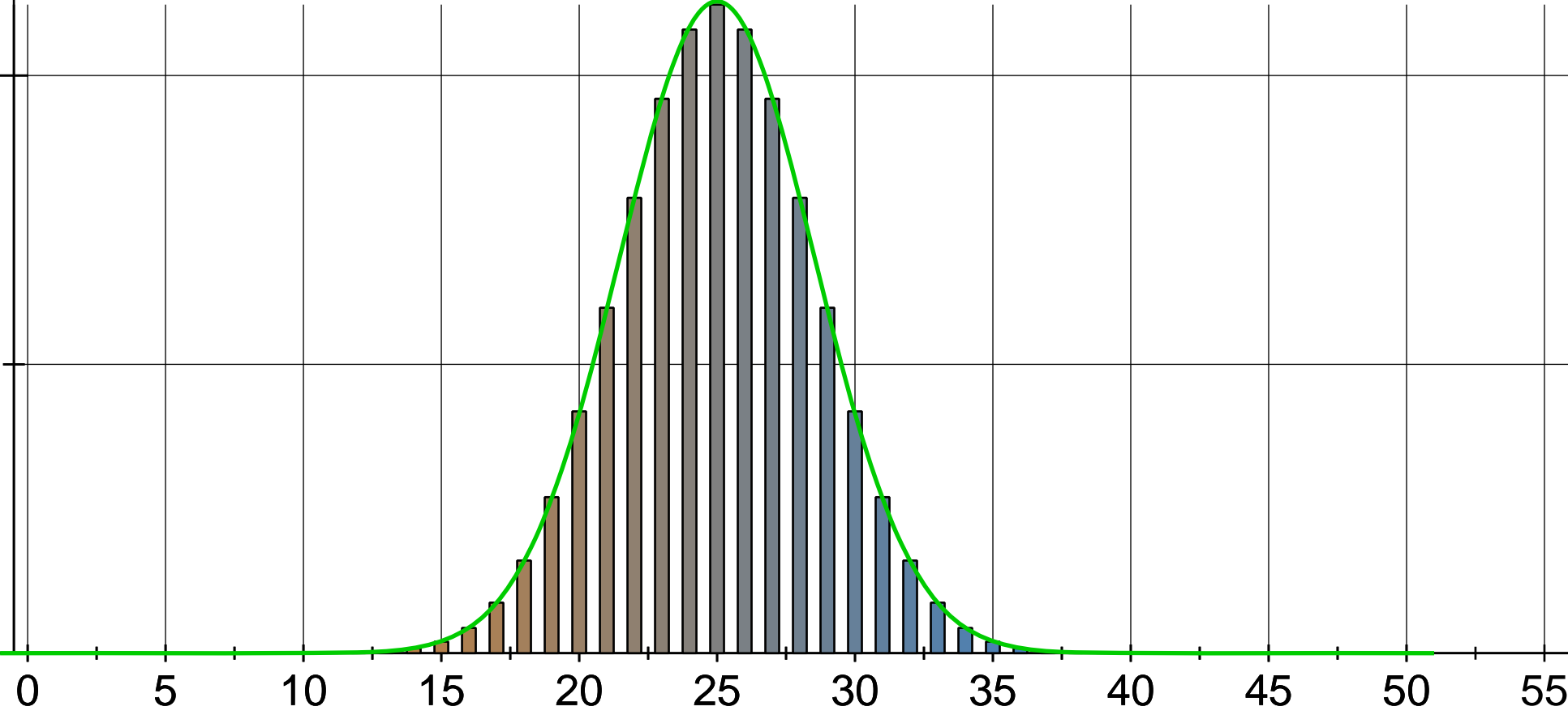
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(25.0, 3.54)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.5

p

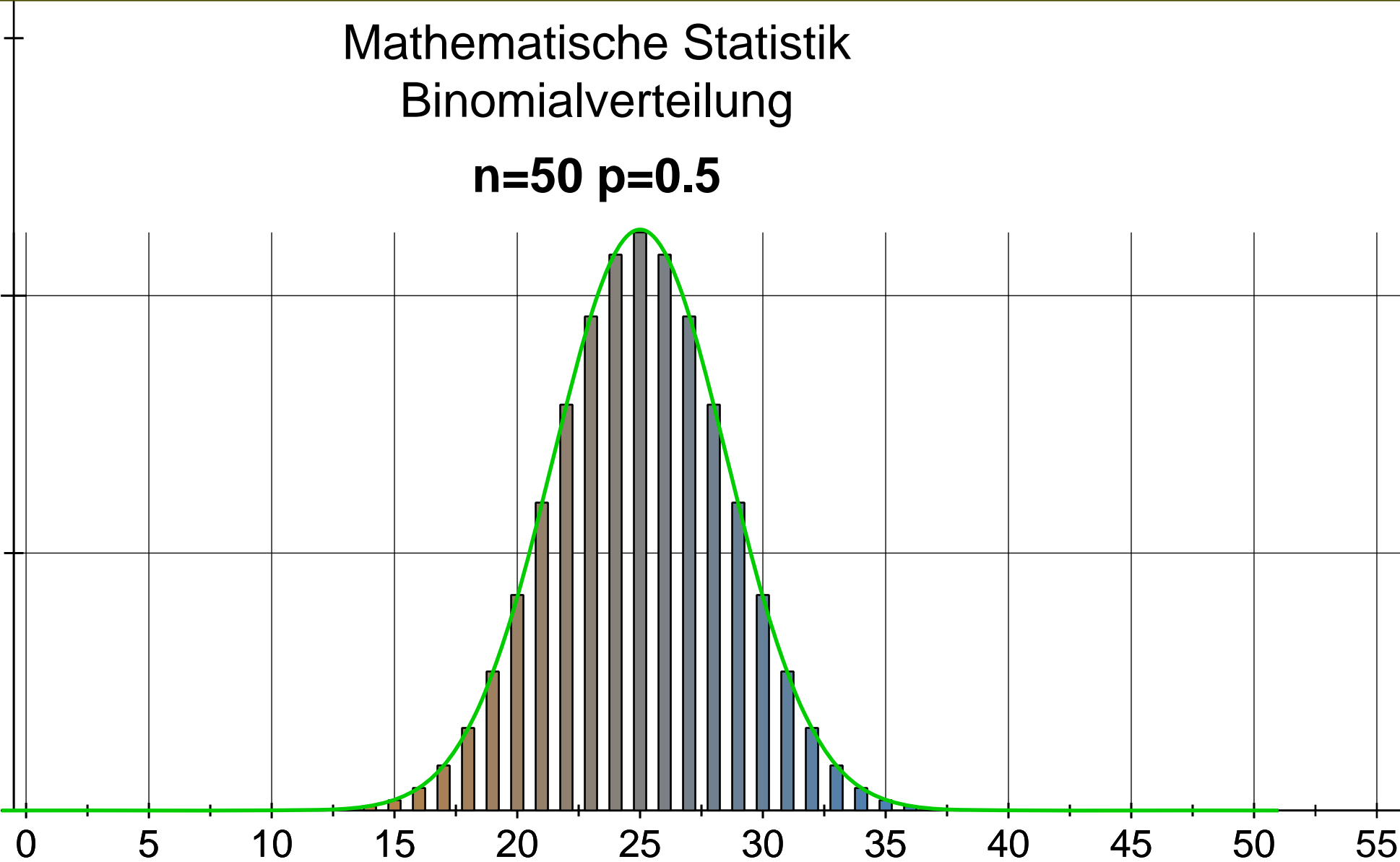
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(25.0, 3.54)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.5

p

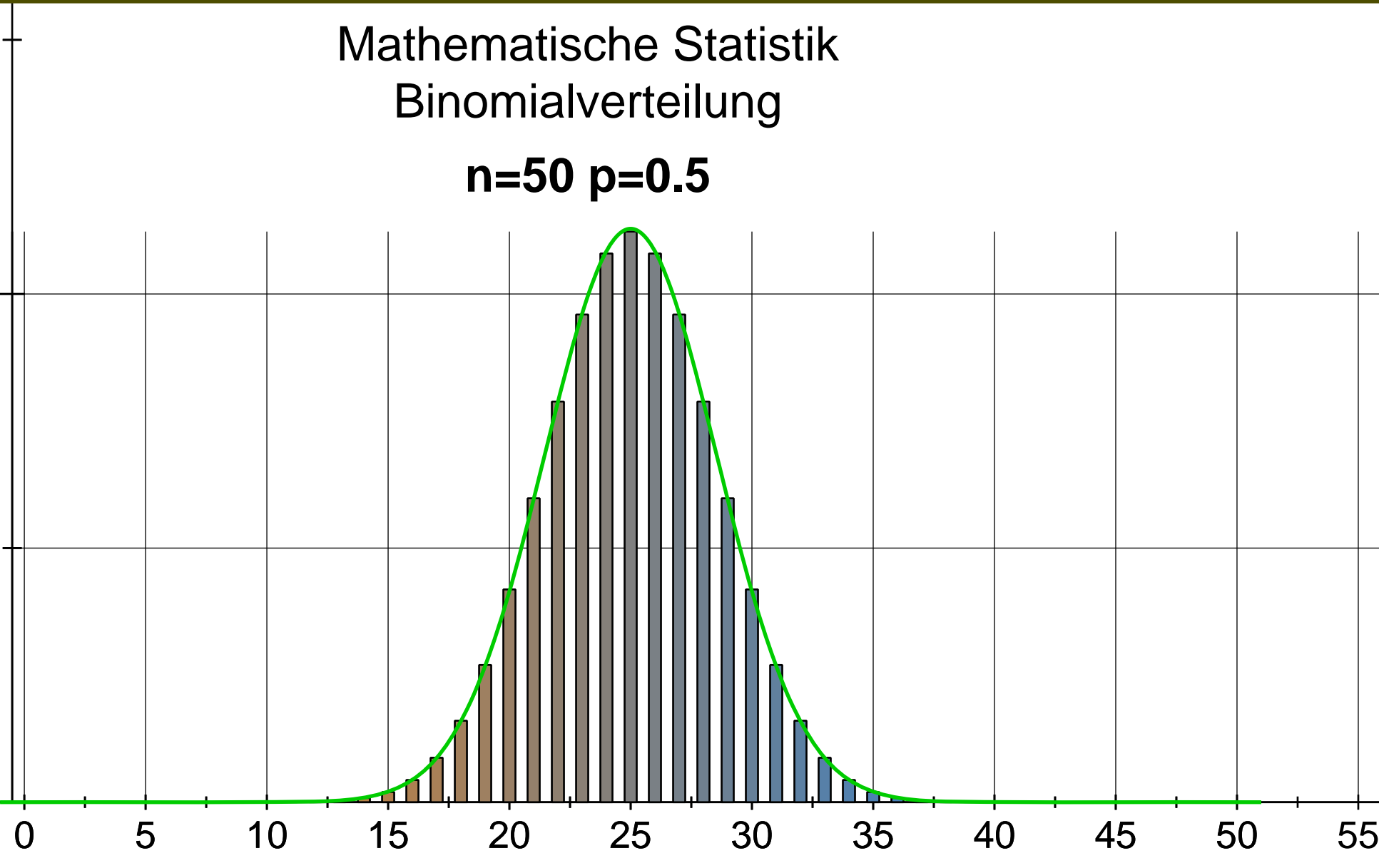
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

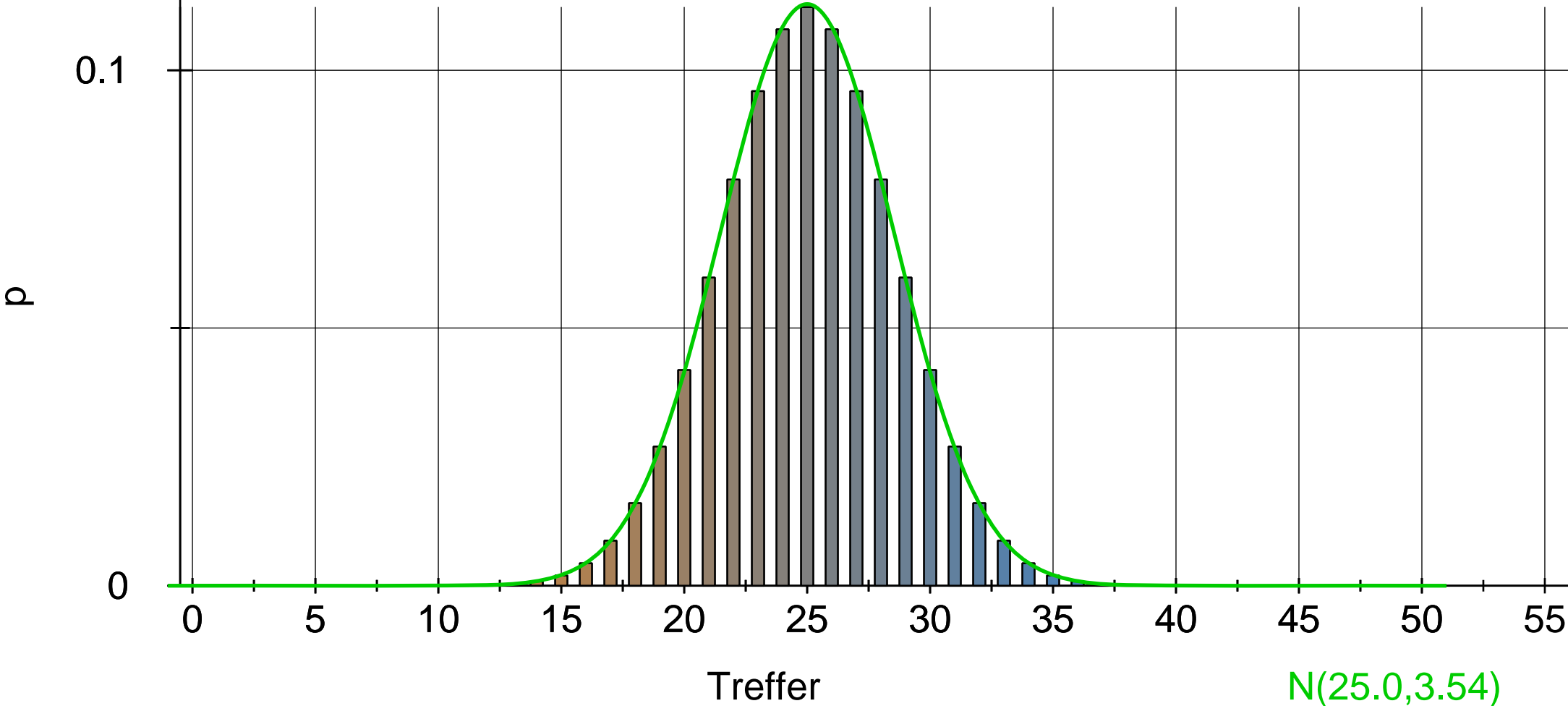
$N(25.0, 3.54)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.5



Mathematische Statistik

Binomialverteilung

n=50 p=0.5

p

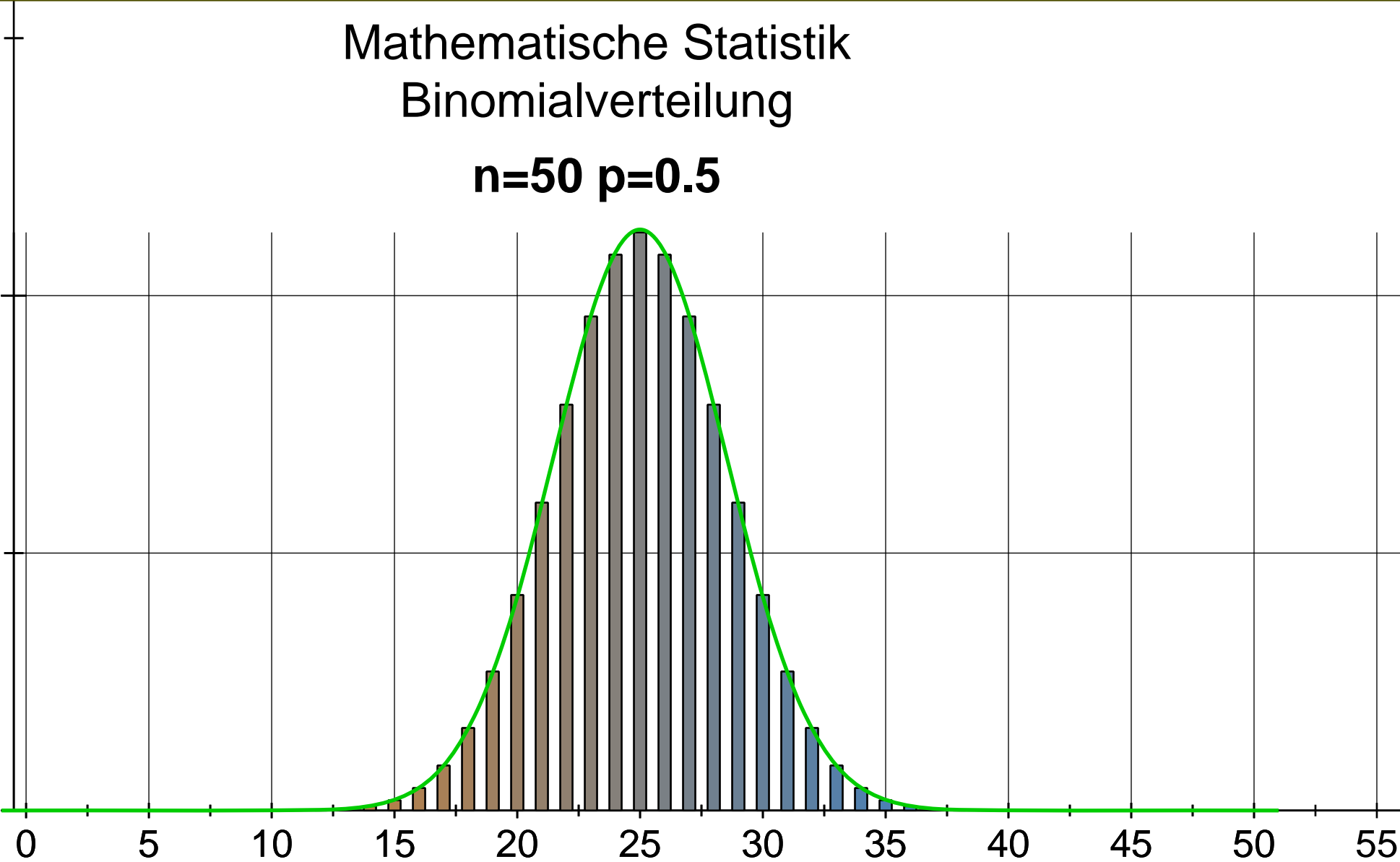
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(25.0, 3.54)$



Mathematische Statistik
Binomialverteilung

n=50 p=0.51

p

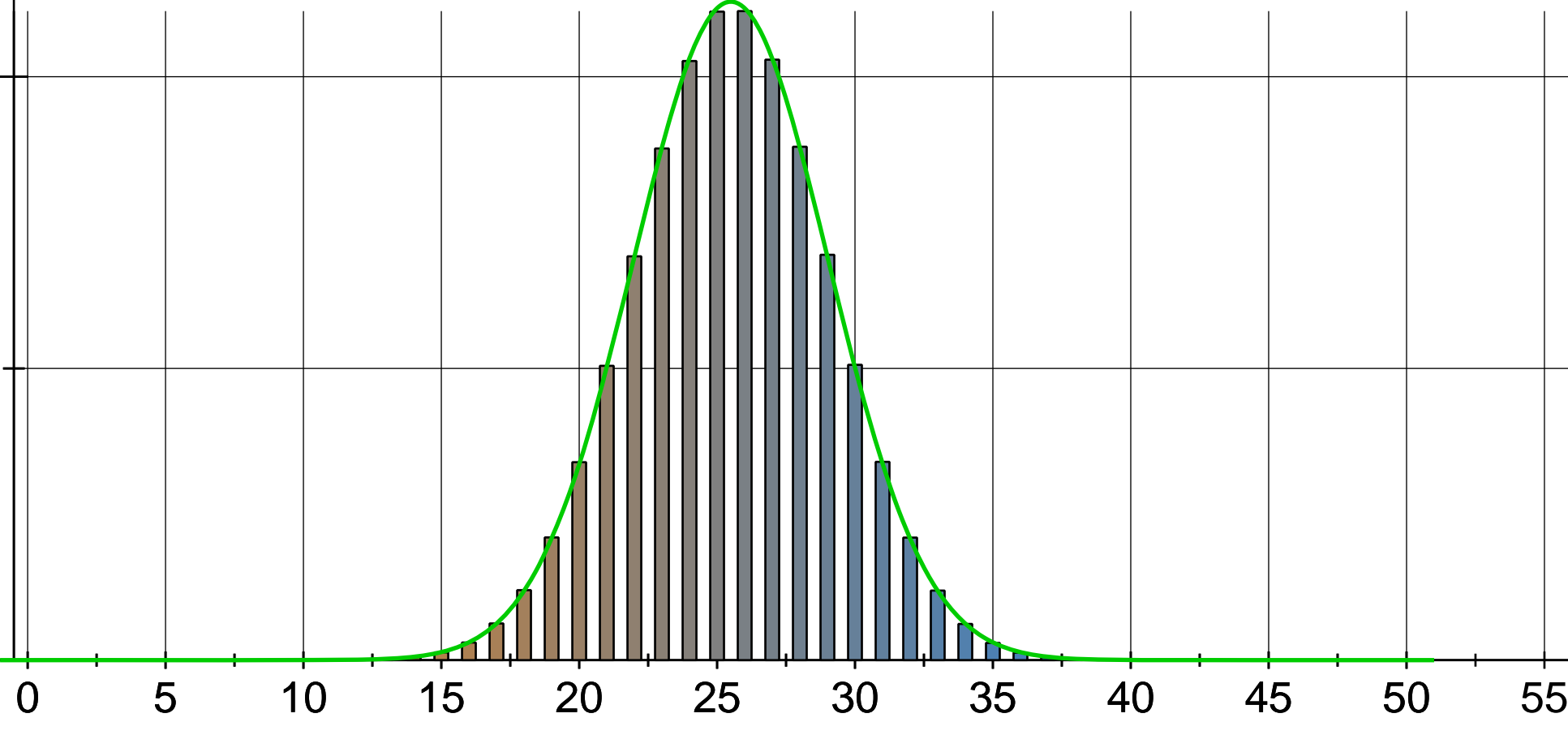
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(25.5, 3.53)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.51

p

0.1

0

0

5

10

15

20

25

30

35

40

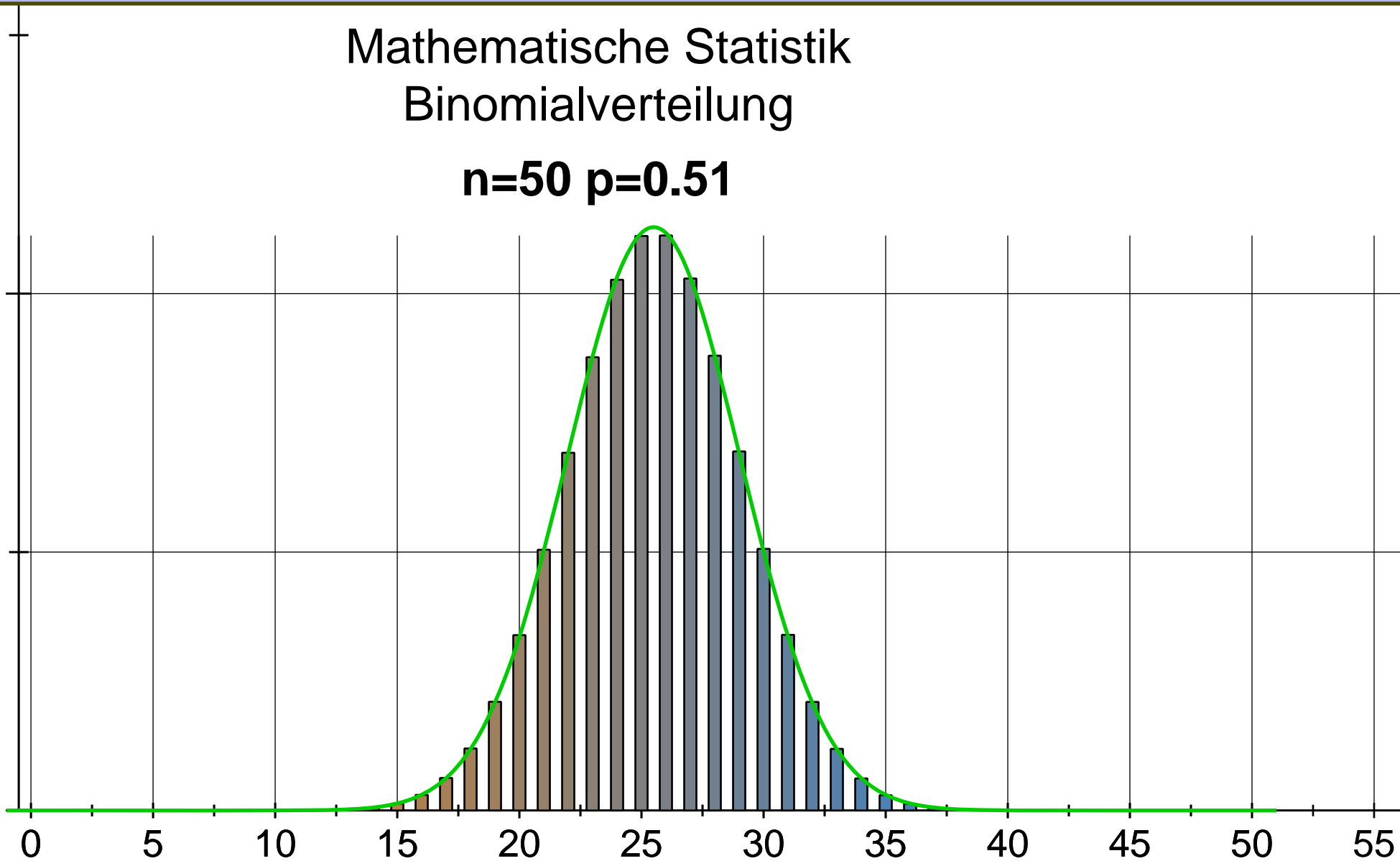
45

50

55

Treffer

$N(25.5, 3.53)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.52

p

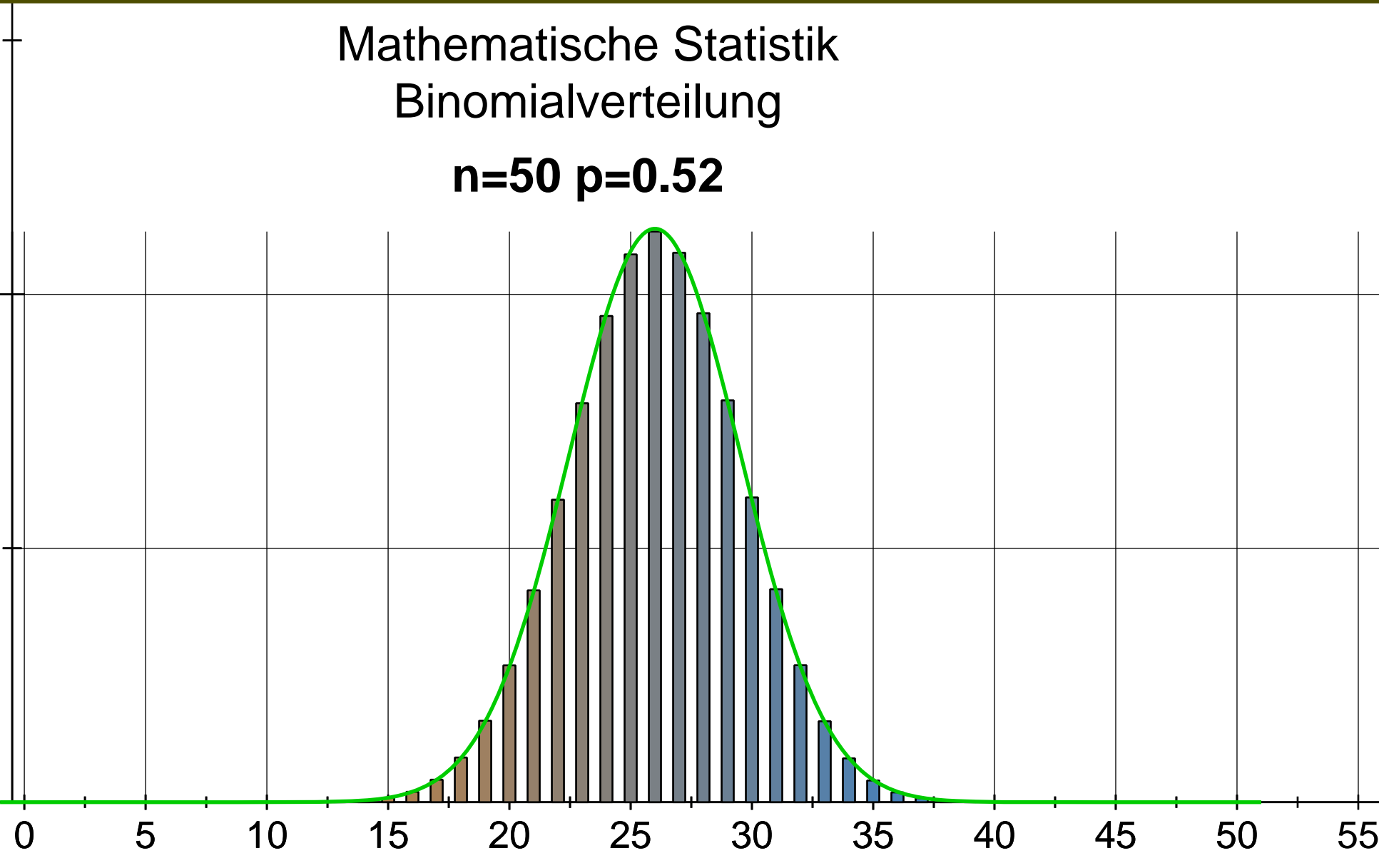
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(26.0, 3.53)$



Mathematische Statistik

Binomialverteilung

$n=50$ $p=0.53$

p

0.1

0

0

5

10

15

20

25

30

35

40

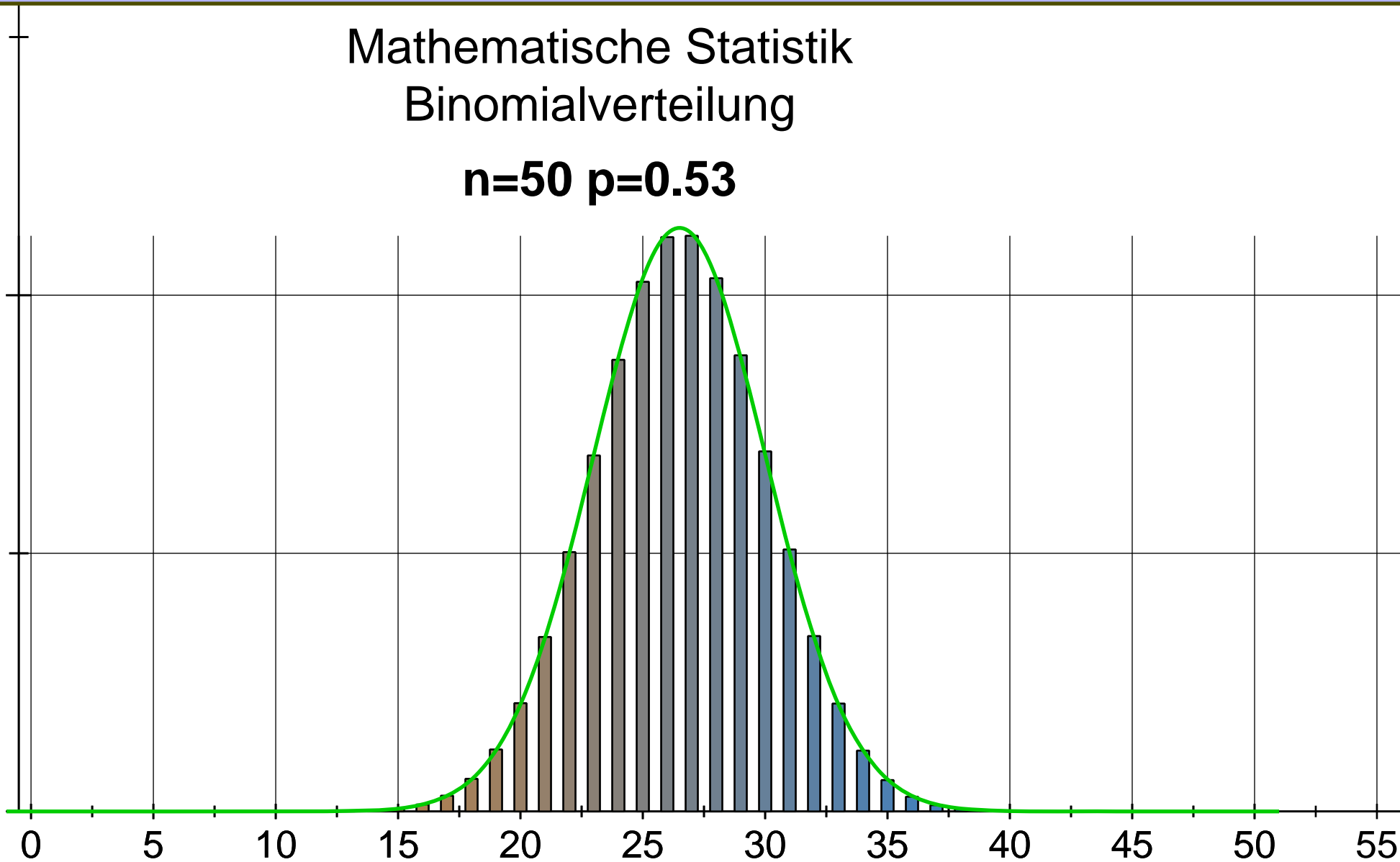
45

50

55

Treffer

$N(26.5, 3.53)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.54

p

0.1

0

0

5

10

15

20

25

30

35

40

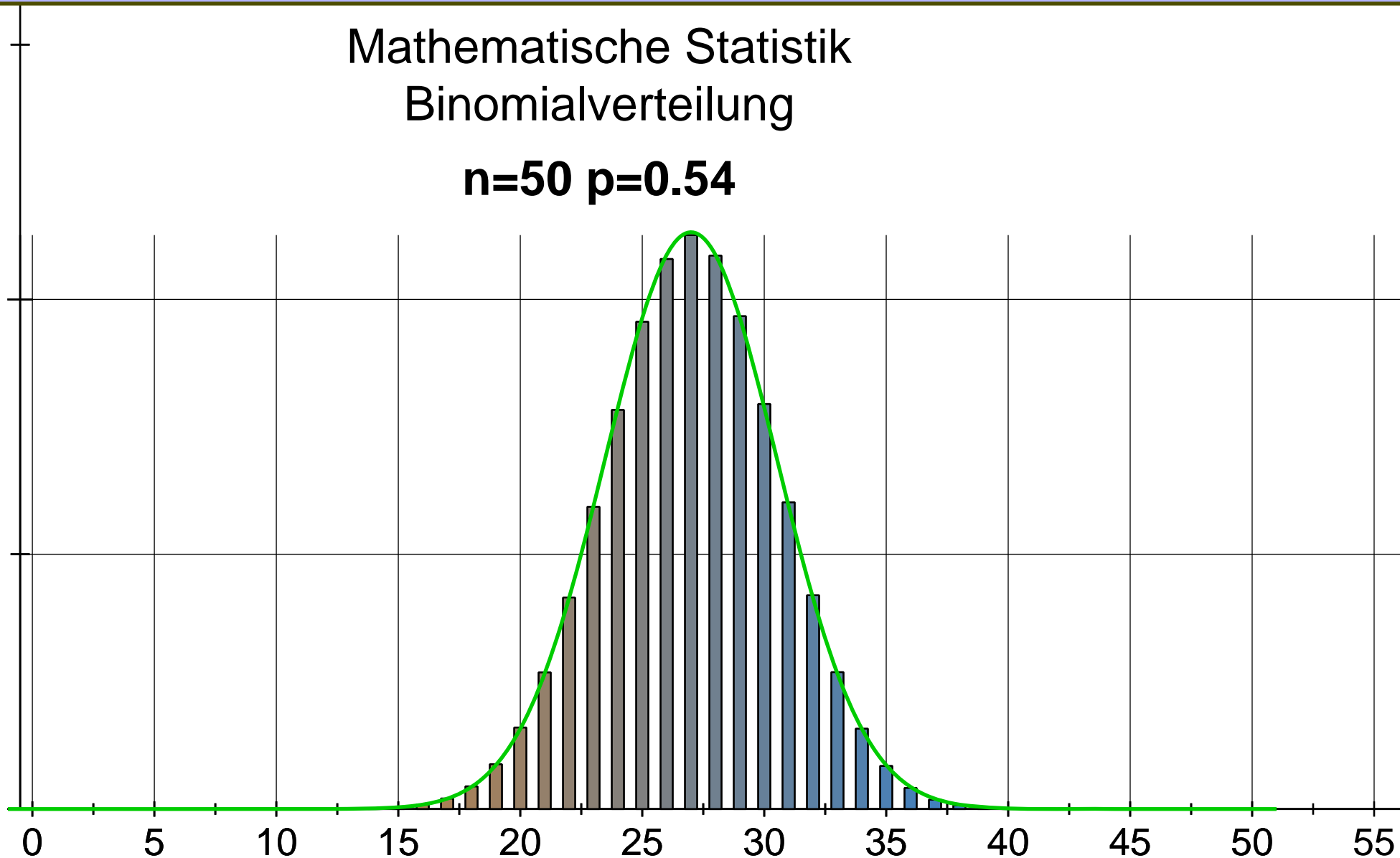
45

50

55

Treffer

$N(27.0, 3.52)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.55

p

0.1

0

0

5

10

15

20

25

30

35

40

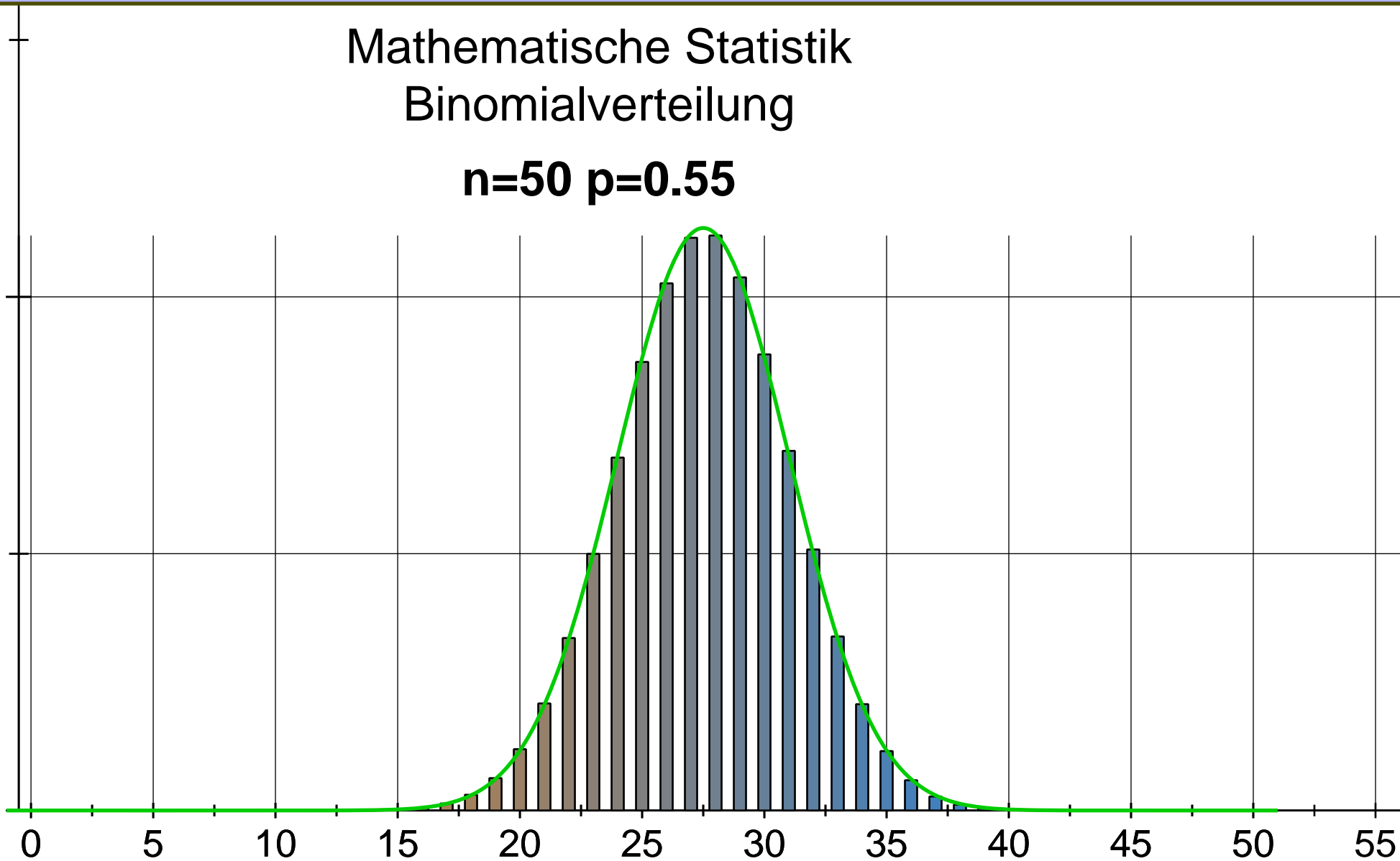
45

50

55

Treffer

$N(27.5, 3.52)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.56

p

0.1

0

0

5

10

15

20

25

30

35

40

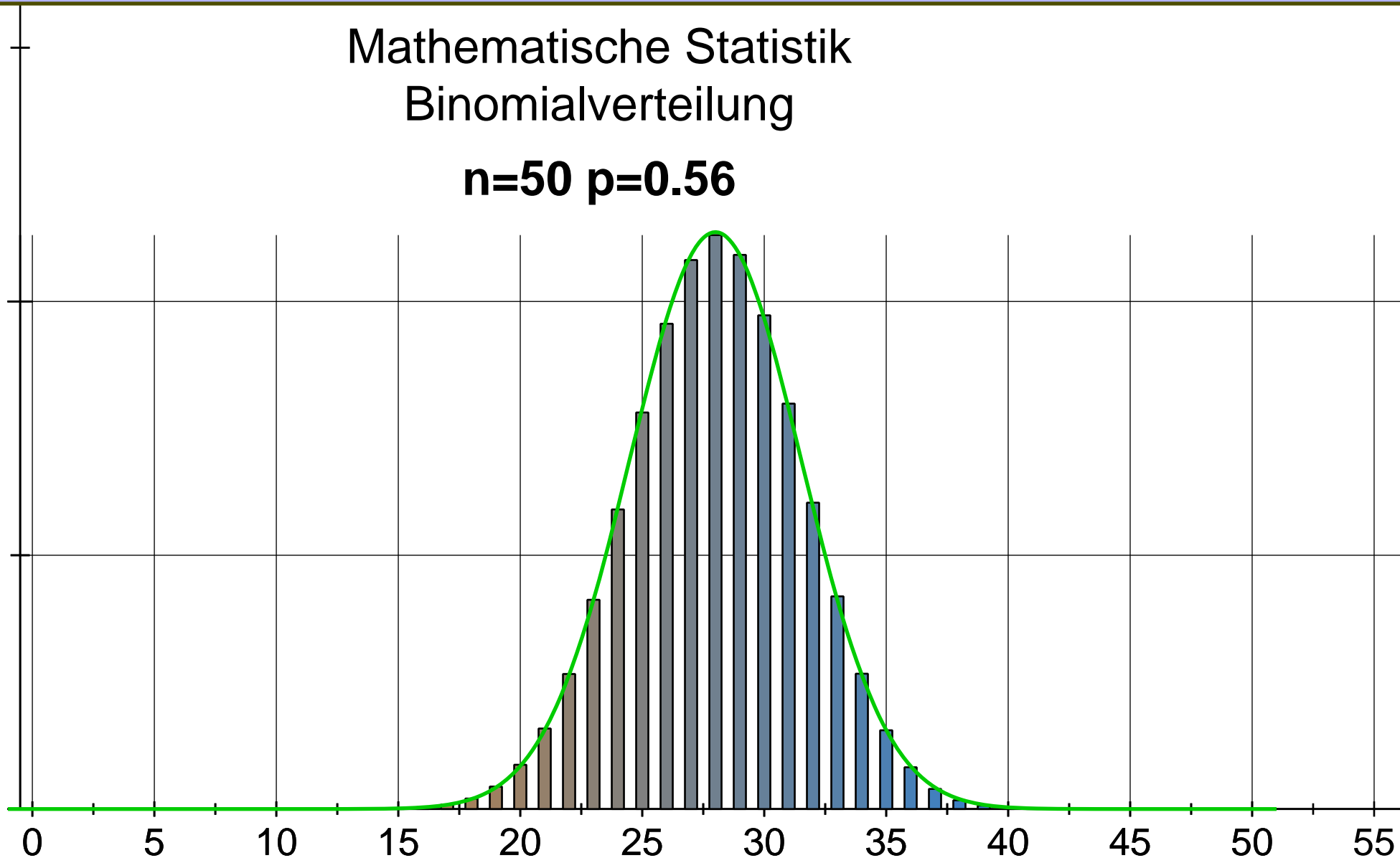
45

50

55

Treffer

$N(28.0, 3.51)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.57

p

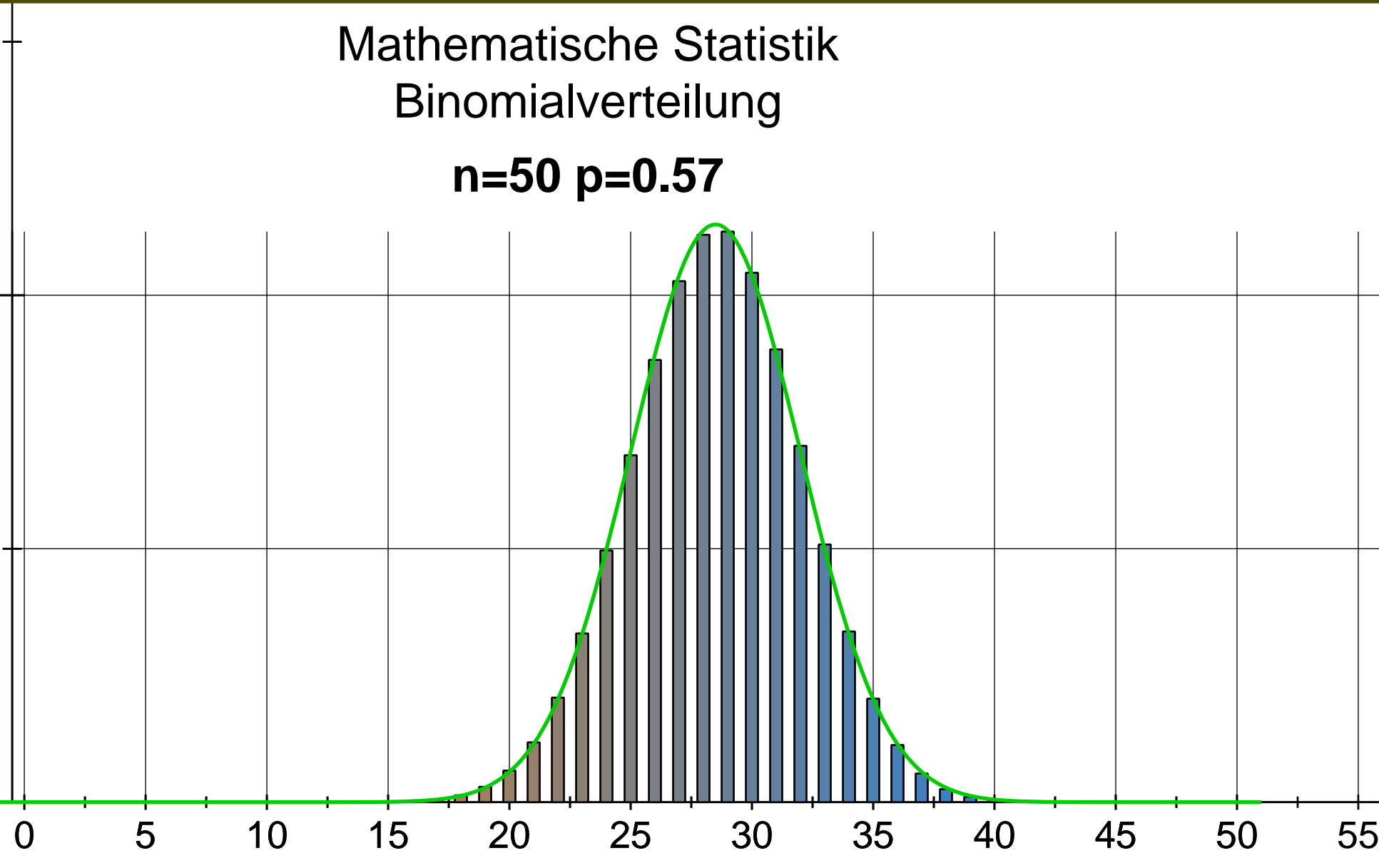
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(28.5, 3.50)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.58

p

0.1

0

0

5

10

15

20

25

30

35

40

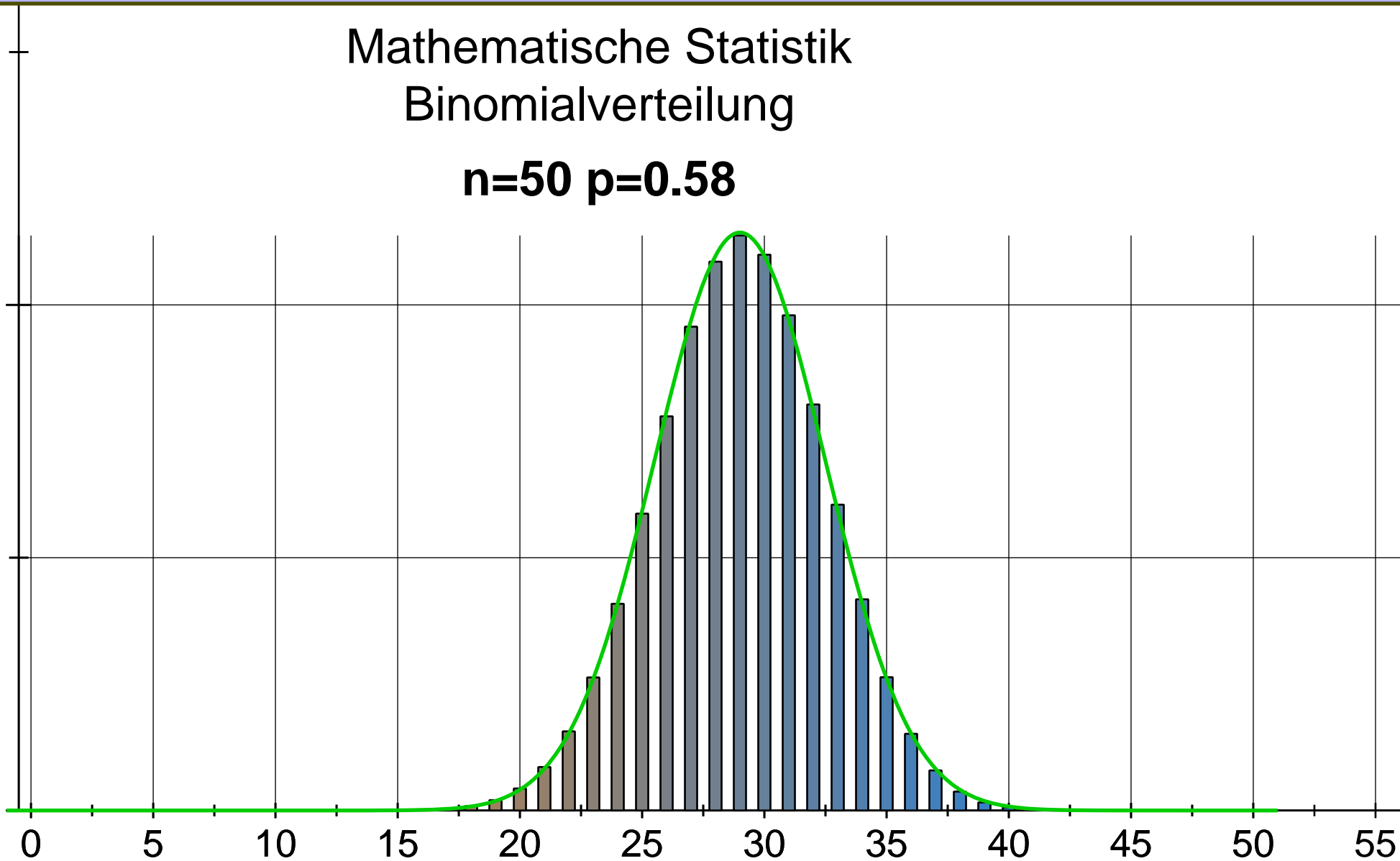
45

50

55

Treffer

$N(29.0, 3.49)$



Mathematische Statistik
Binomialverteilung

n=50 p=0.59

p

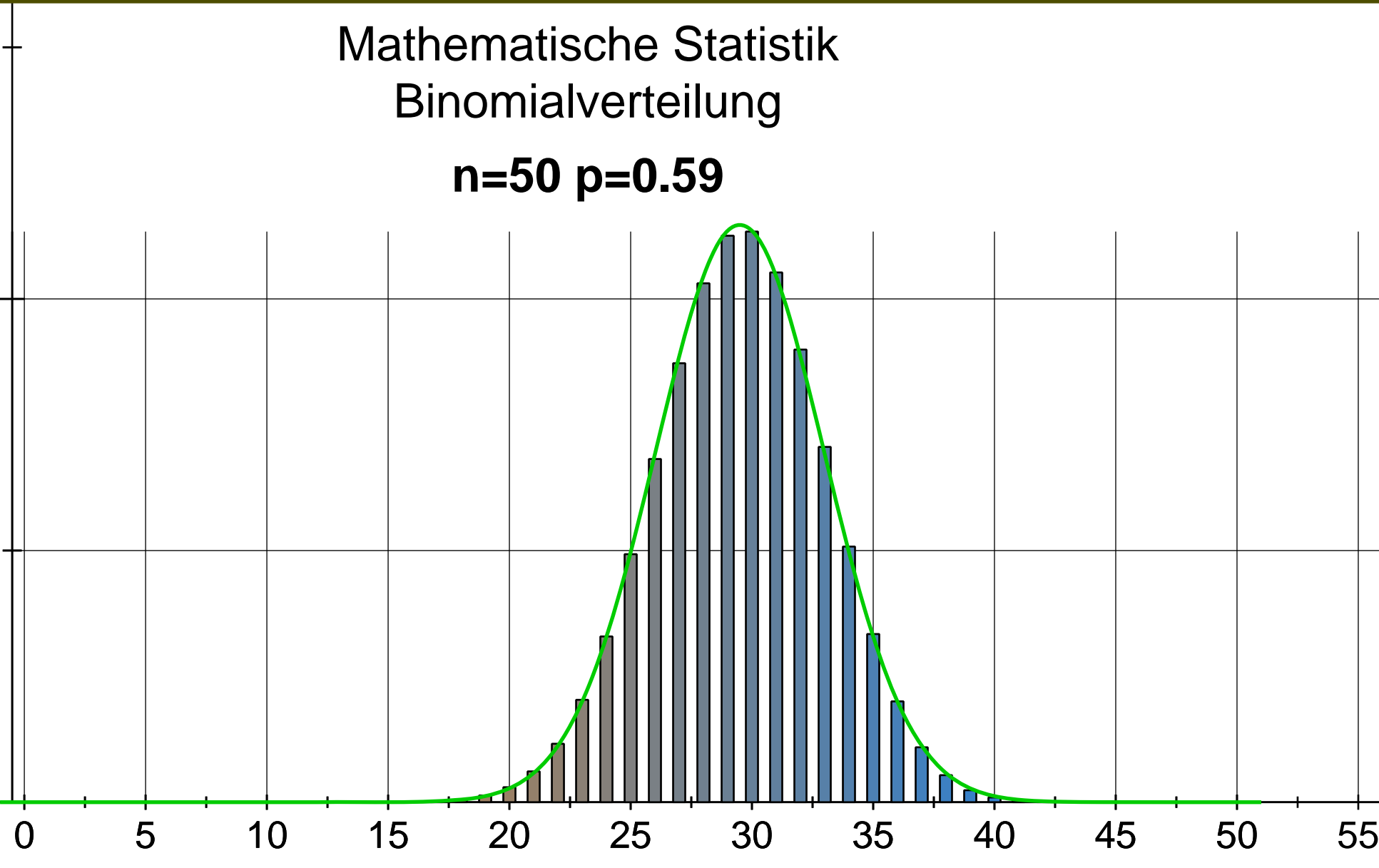
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(29.5, 3.48)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.6

p

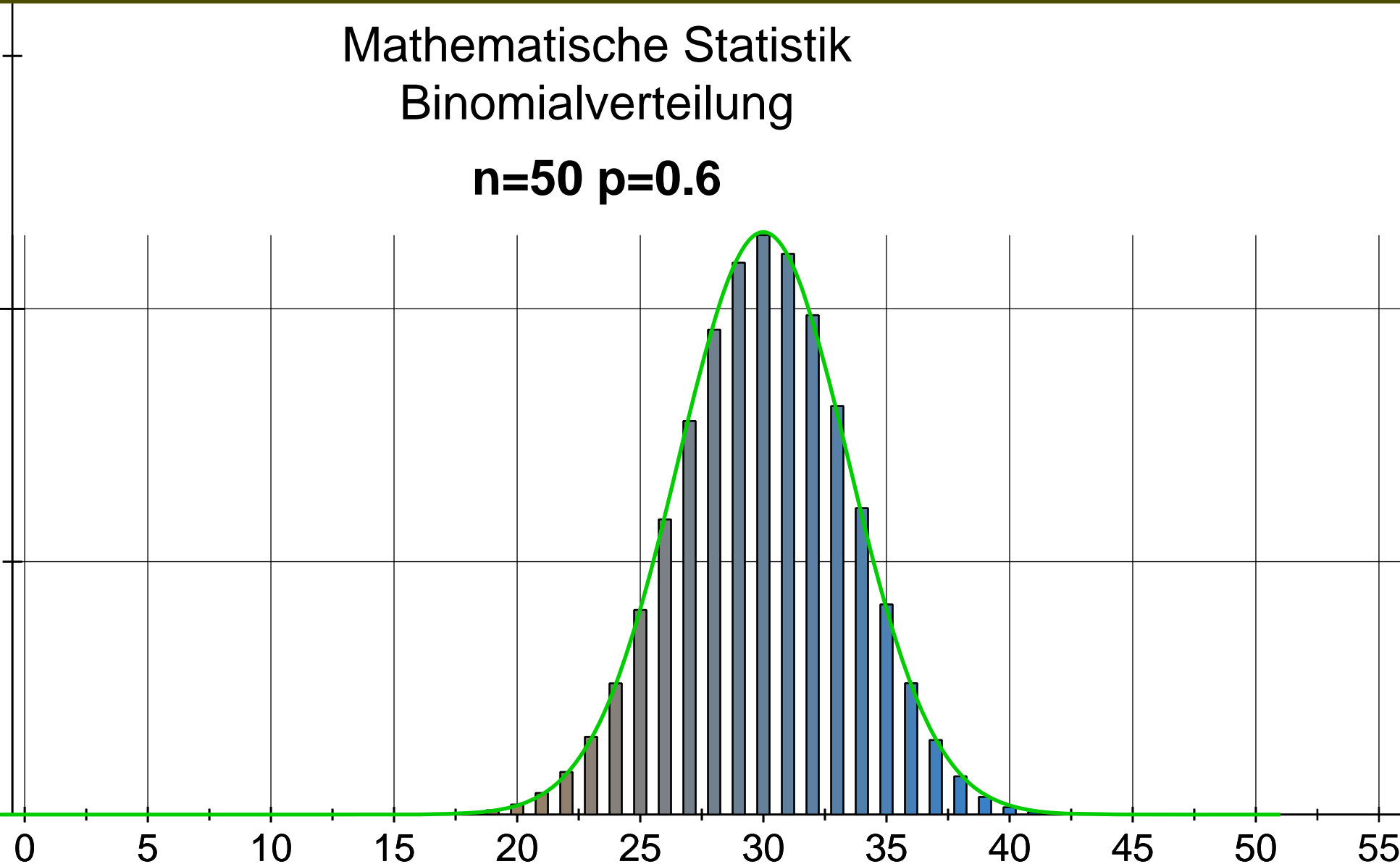
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(30.0, 3.46)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.62

p

0.1

0

0

5

10

15

20

25

30

35

40

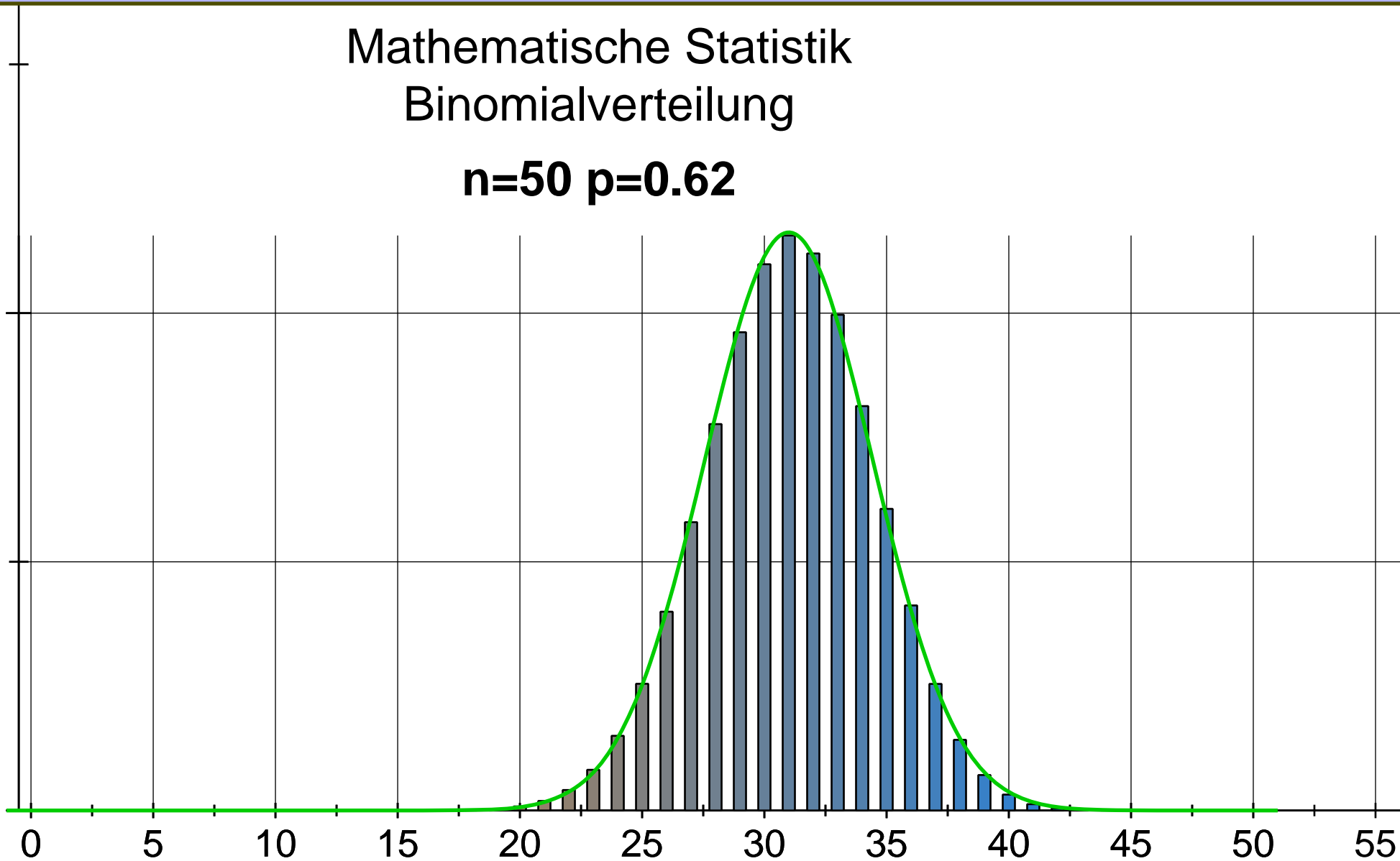
45

50

55

Treffer

$N(31.0, 3.43)$



Mathematische Statistik
Binomialverteilung

n=50 p=0.64

p

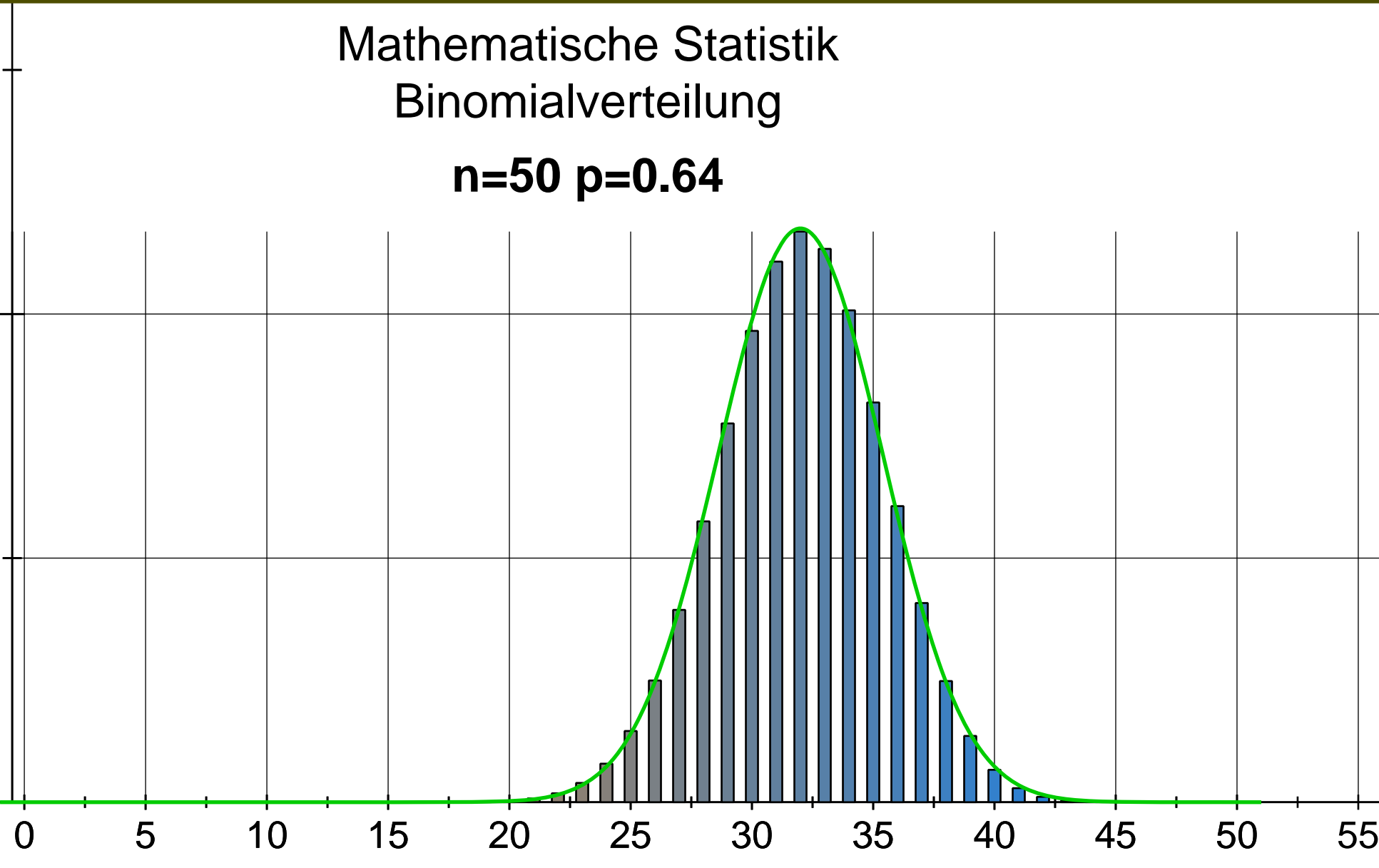
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(32.0, 3.39)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.66

p

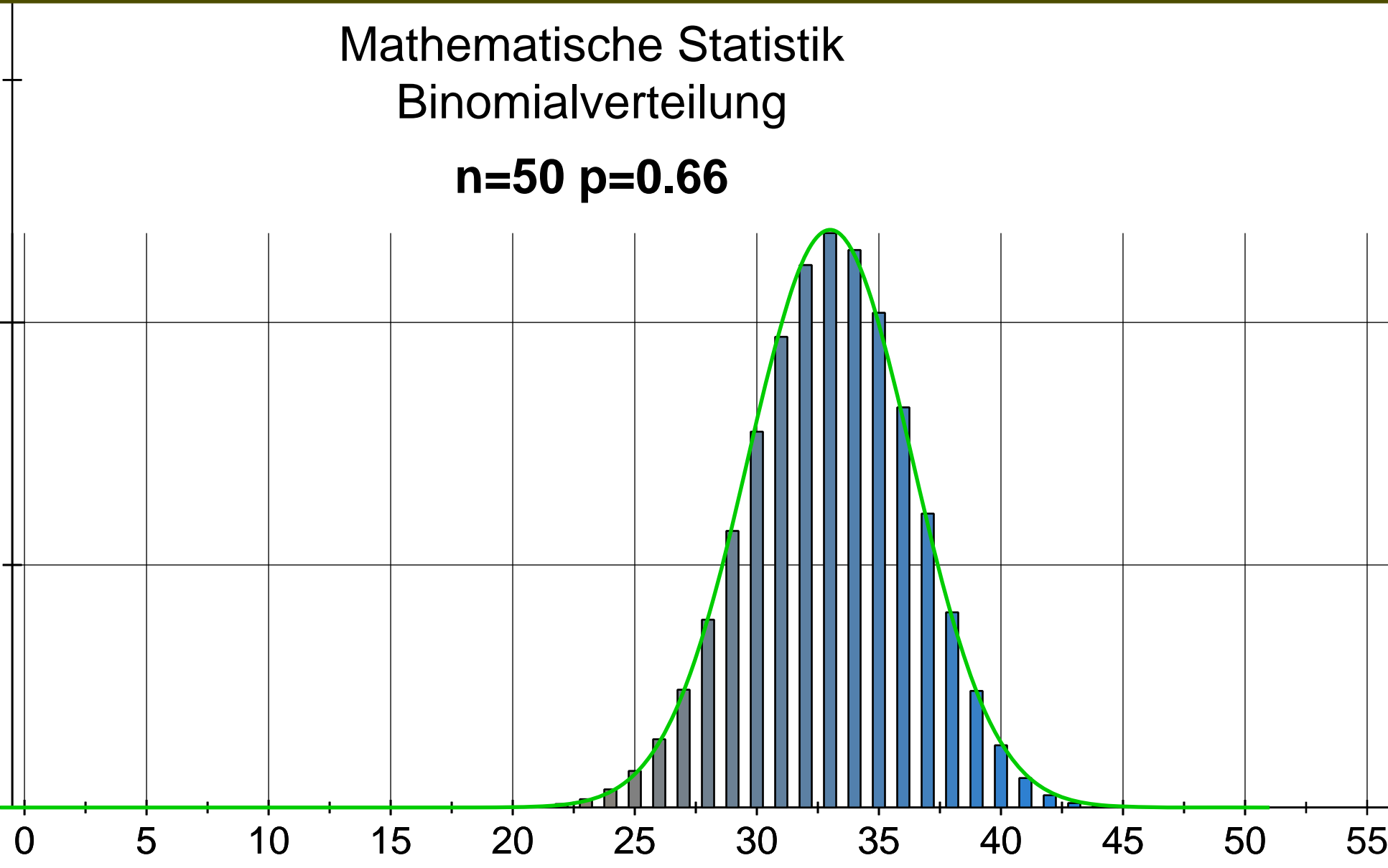
0.1

0

0 5 10 15 20 25 30 35 40 45 50 55

Treffer

$N(33.0, 3.35)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.68

p

0.1

0

0

5

10

15

20

25

30

35

40

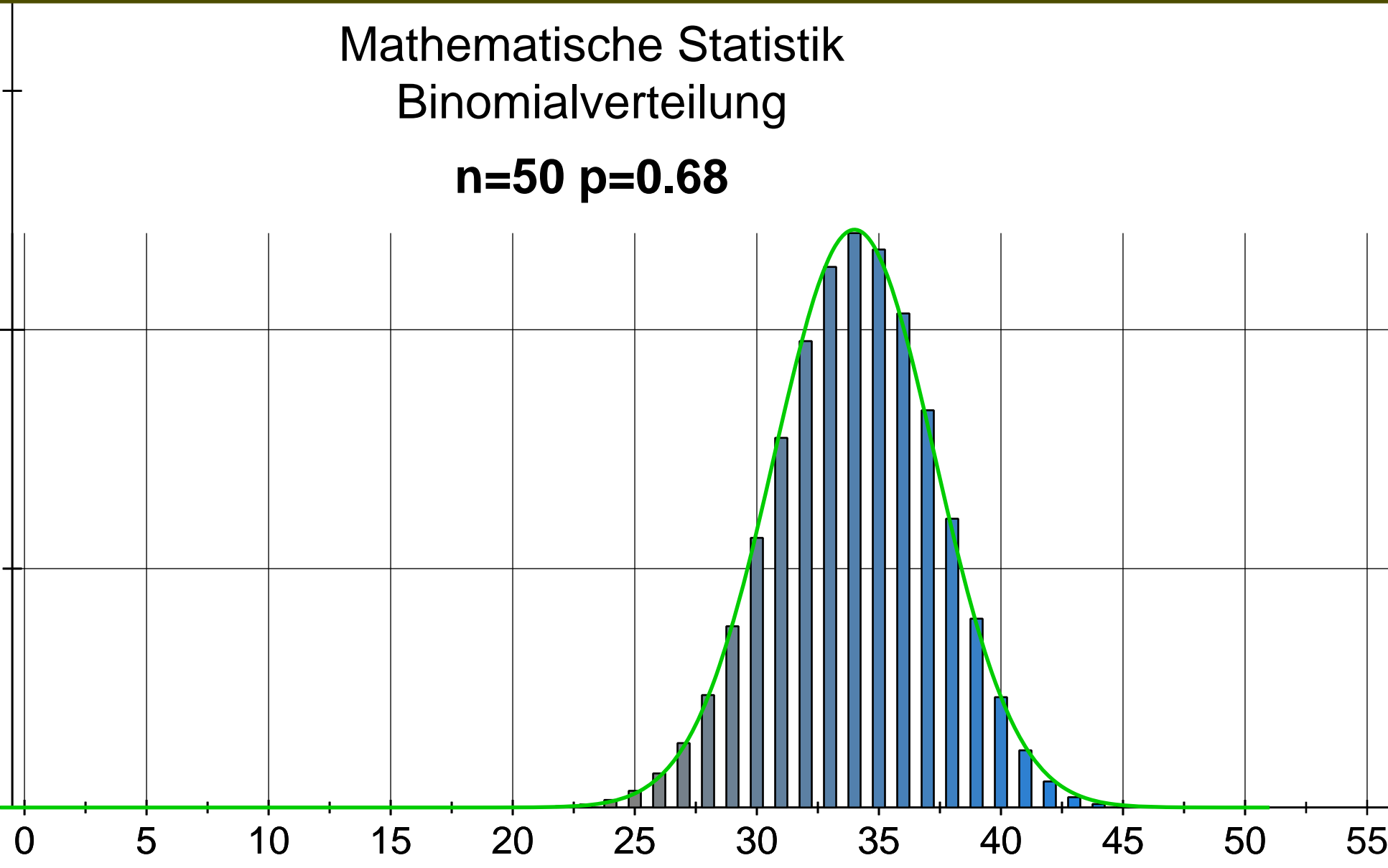
45

50

55

Treffer

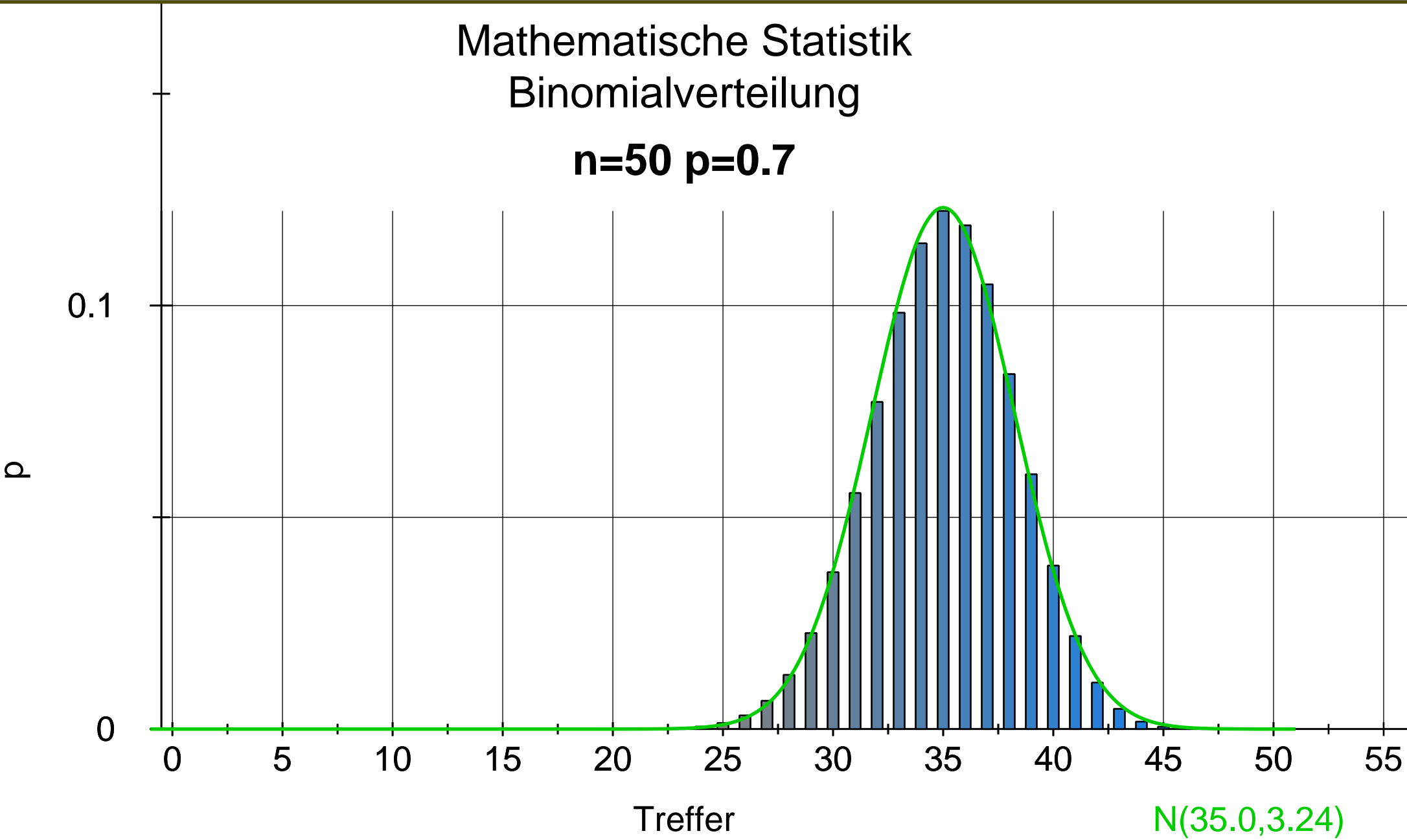
$N(34.0, 3.30)$



Mathematische Statistik

Binomialverteilung

n=50 p=0.7



Mathematische Statistik

Binomialverteilung

$n=50$ $p=0.75$

p

0.1

0

0

5

10

15

20

25

30

35

40

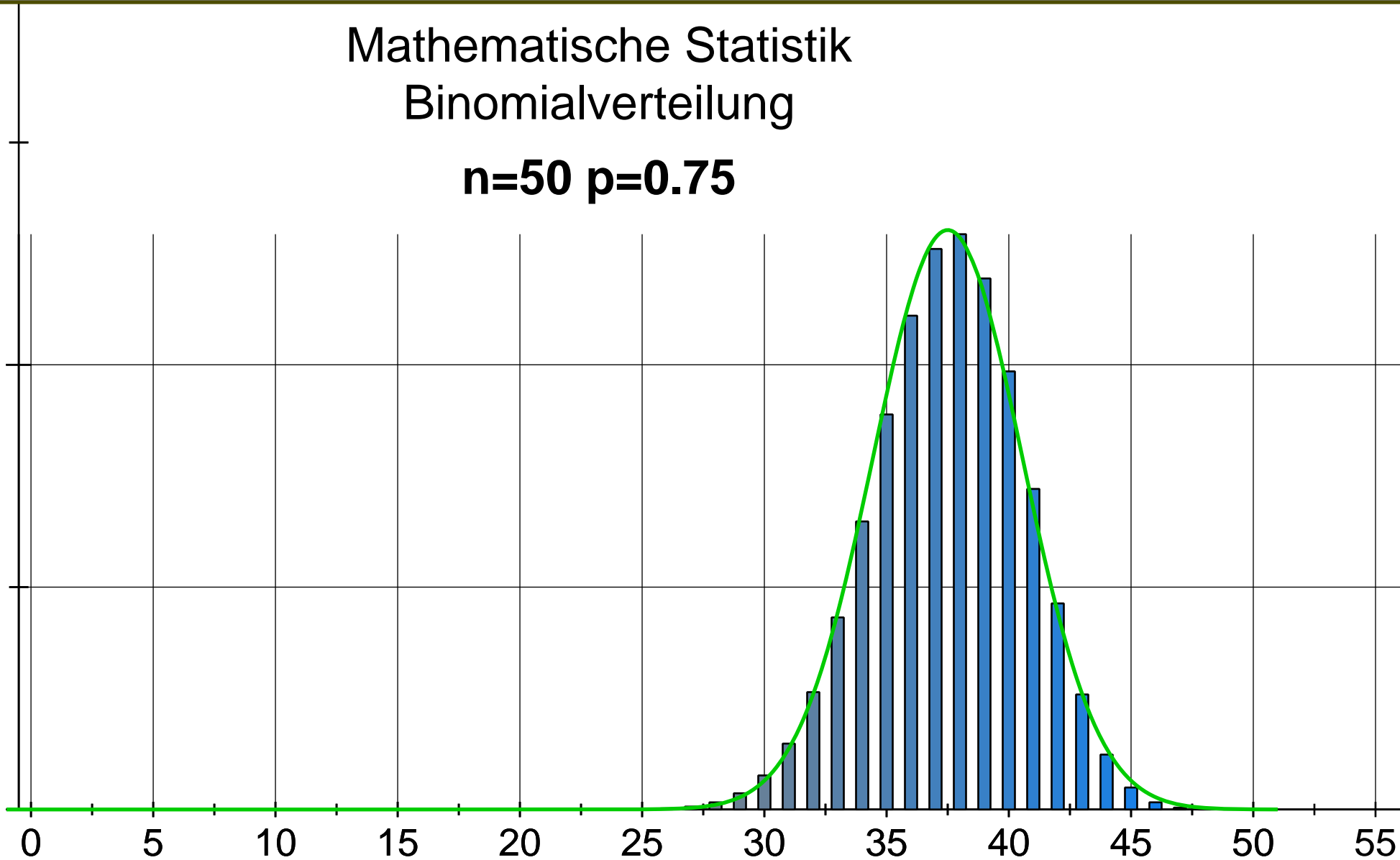
45

50

55

Treffer

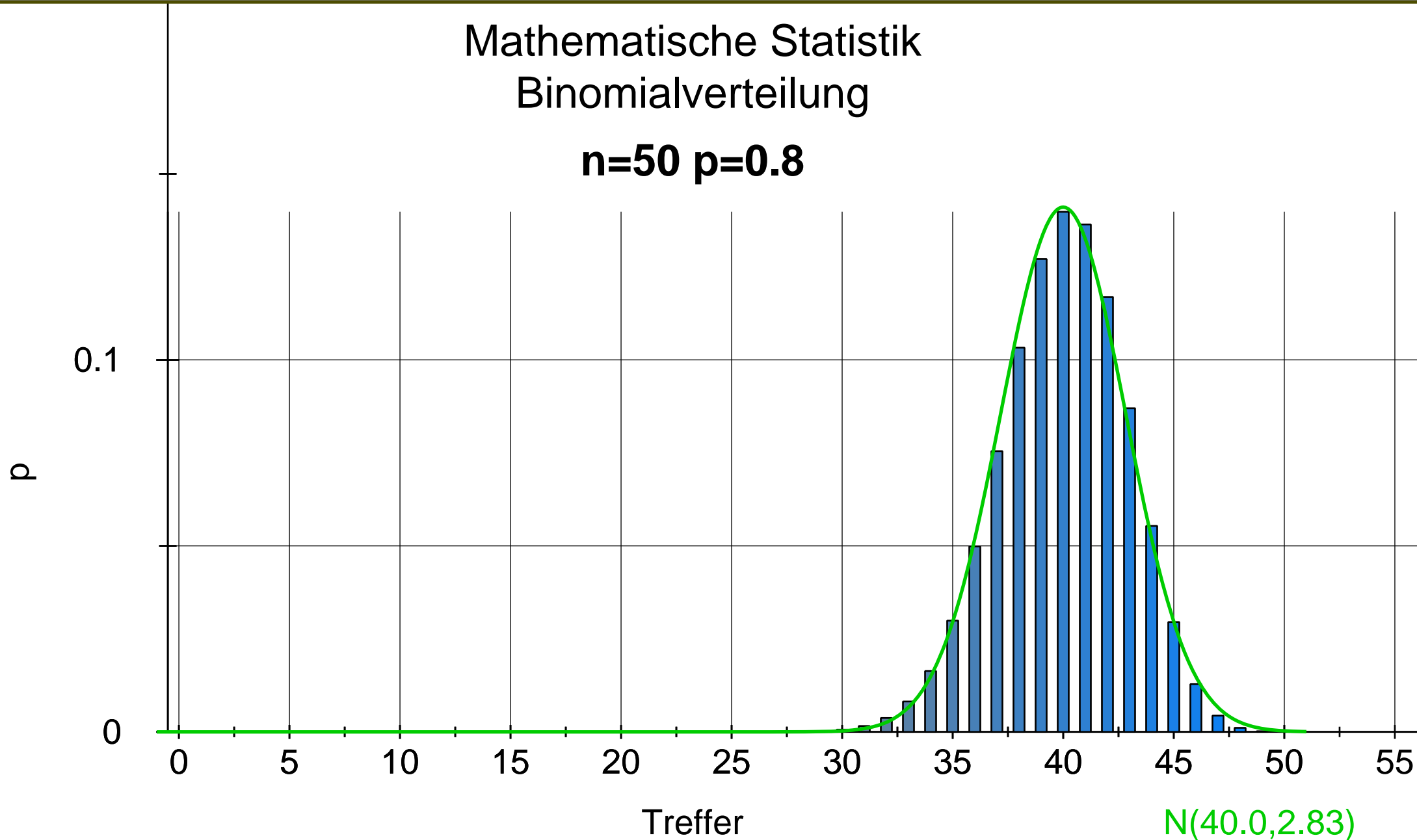
$N(37.5, 3.06)$



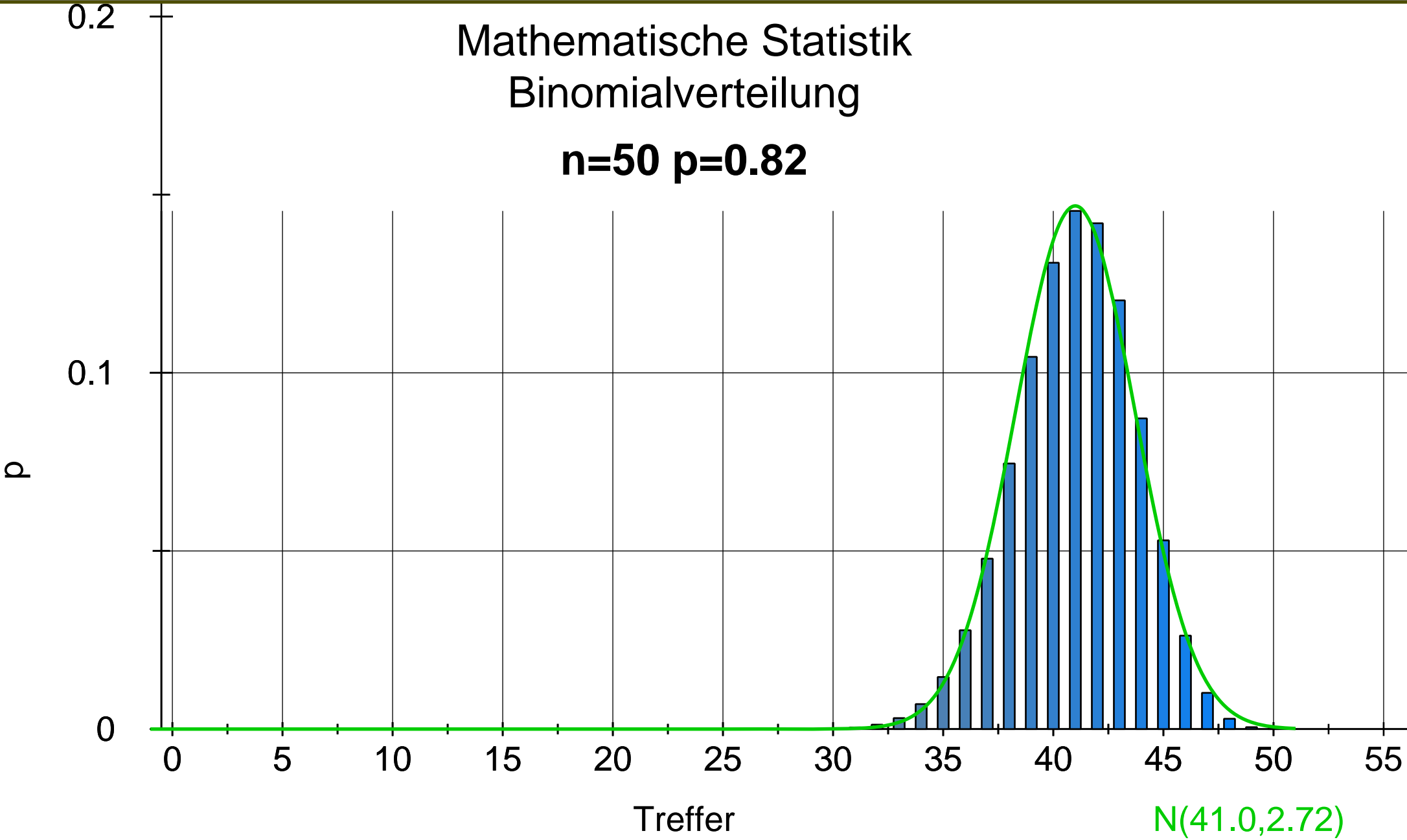
Mathematische Statistik

Binomialverteilung

n=50 p=0.8

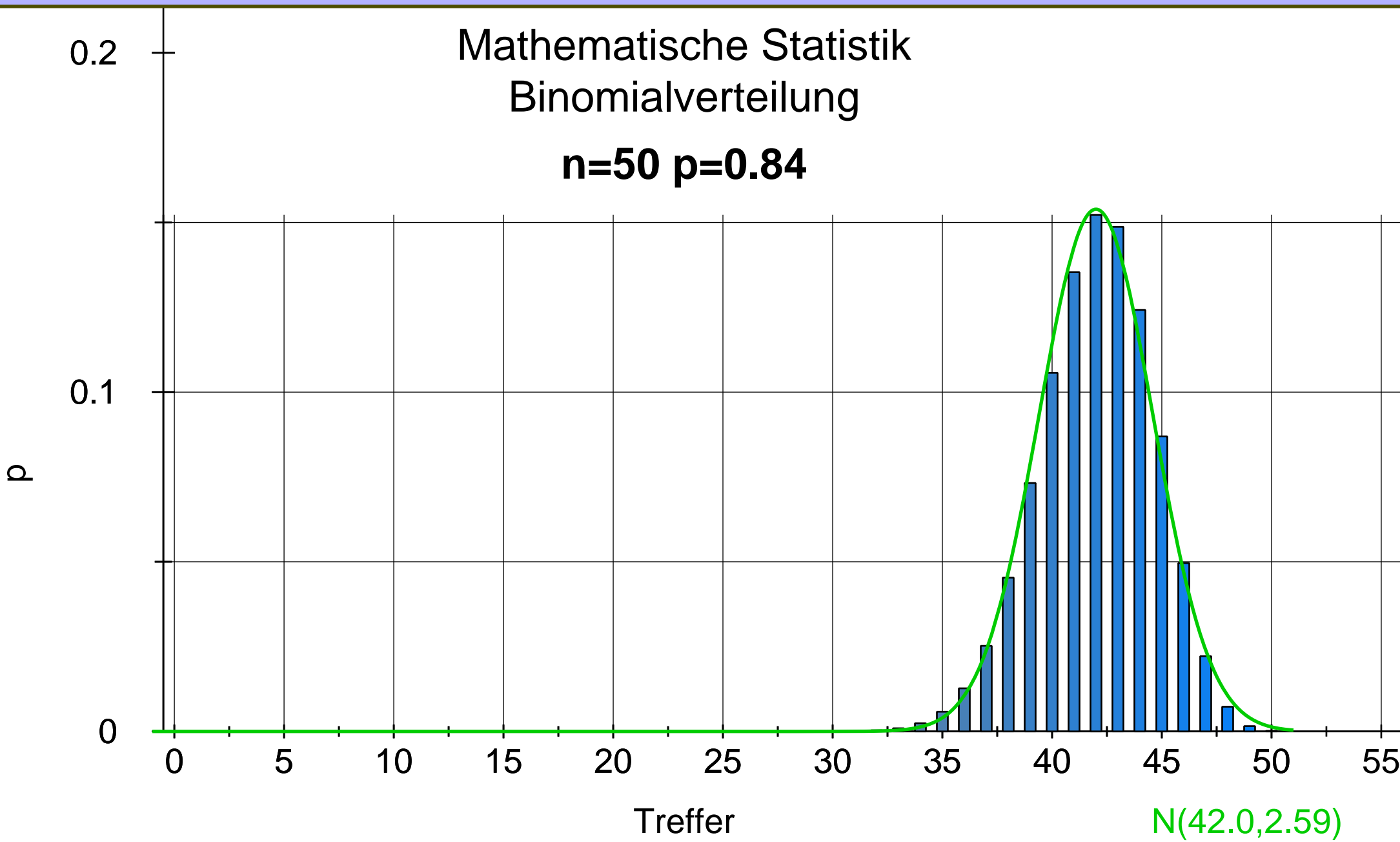


Mathematische Statistik
Binomialverteilung
n=50 p=0.82



Mathematische Statistik
Binomialverteilung

n=50 p=0.84

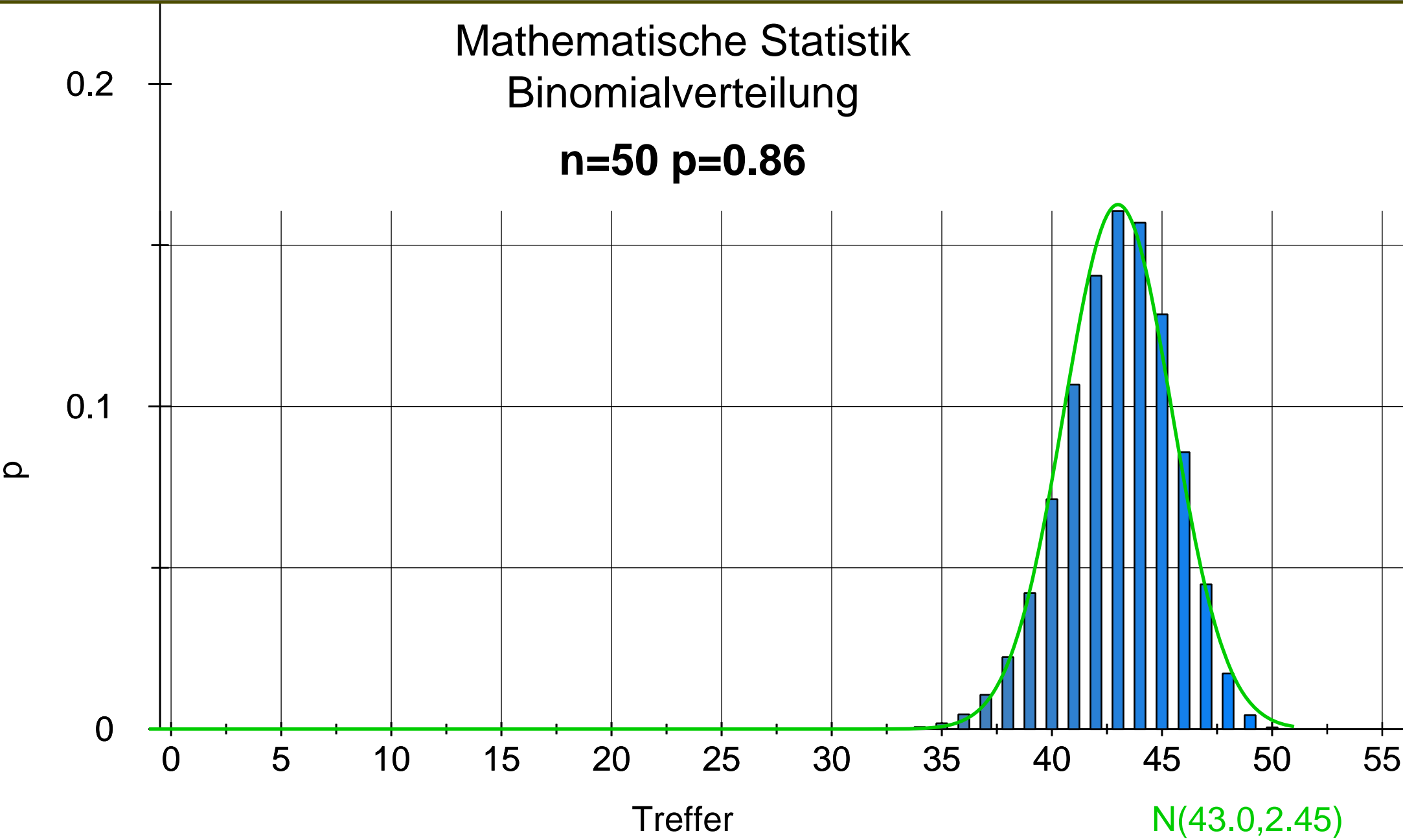


$N(42.0, 2.59)$

Mathematische Statistik

Binomialverteilung

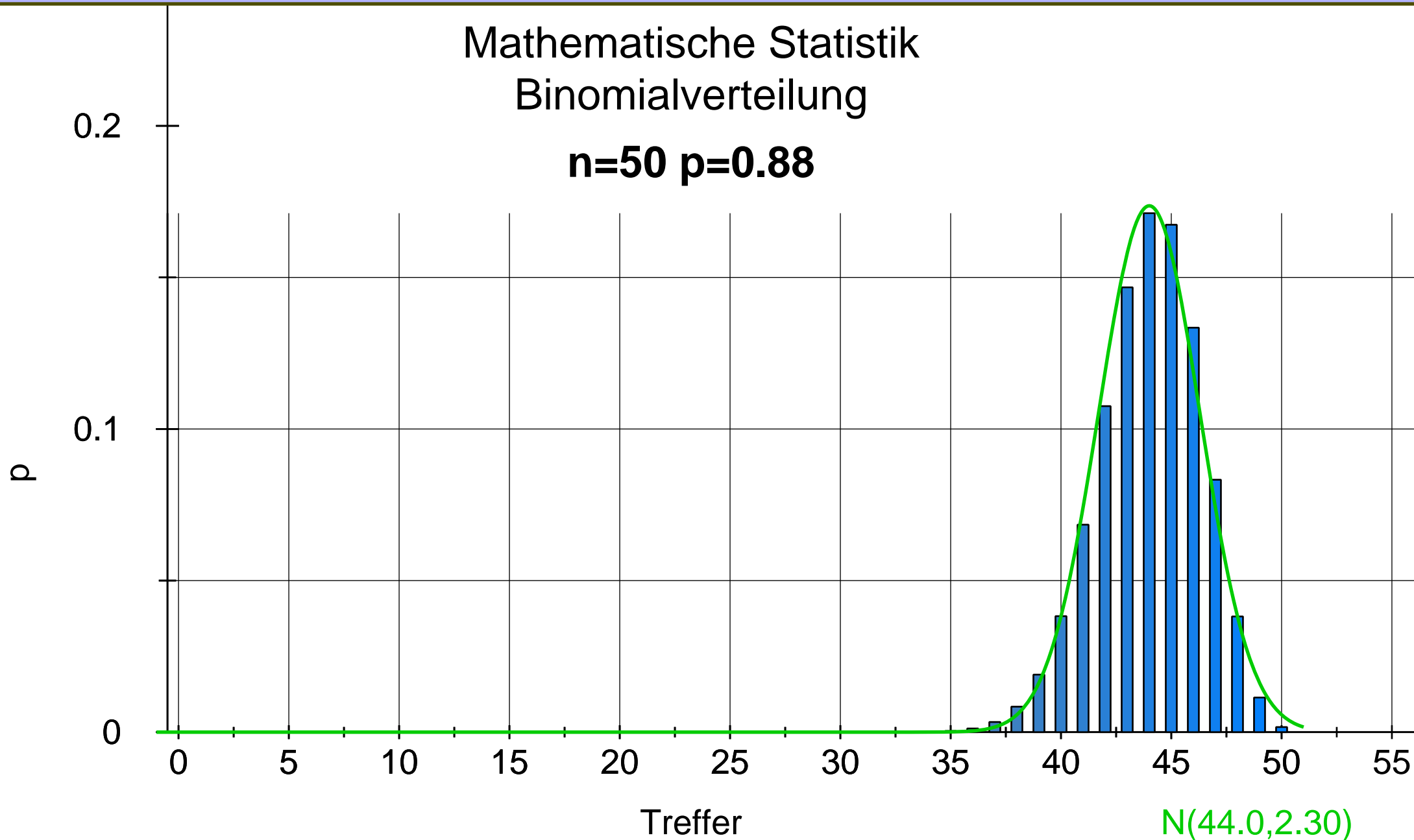
n=50 p=0.86



Mathematische Statistik

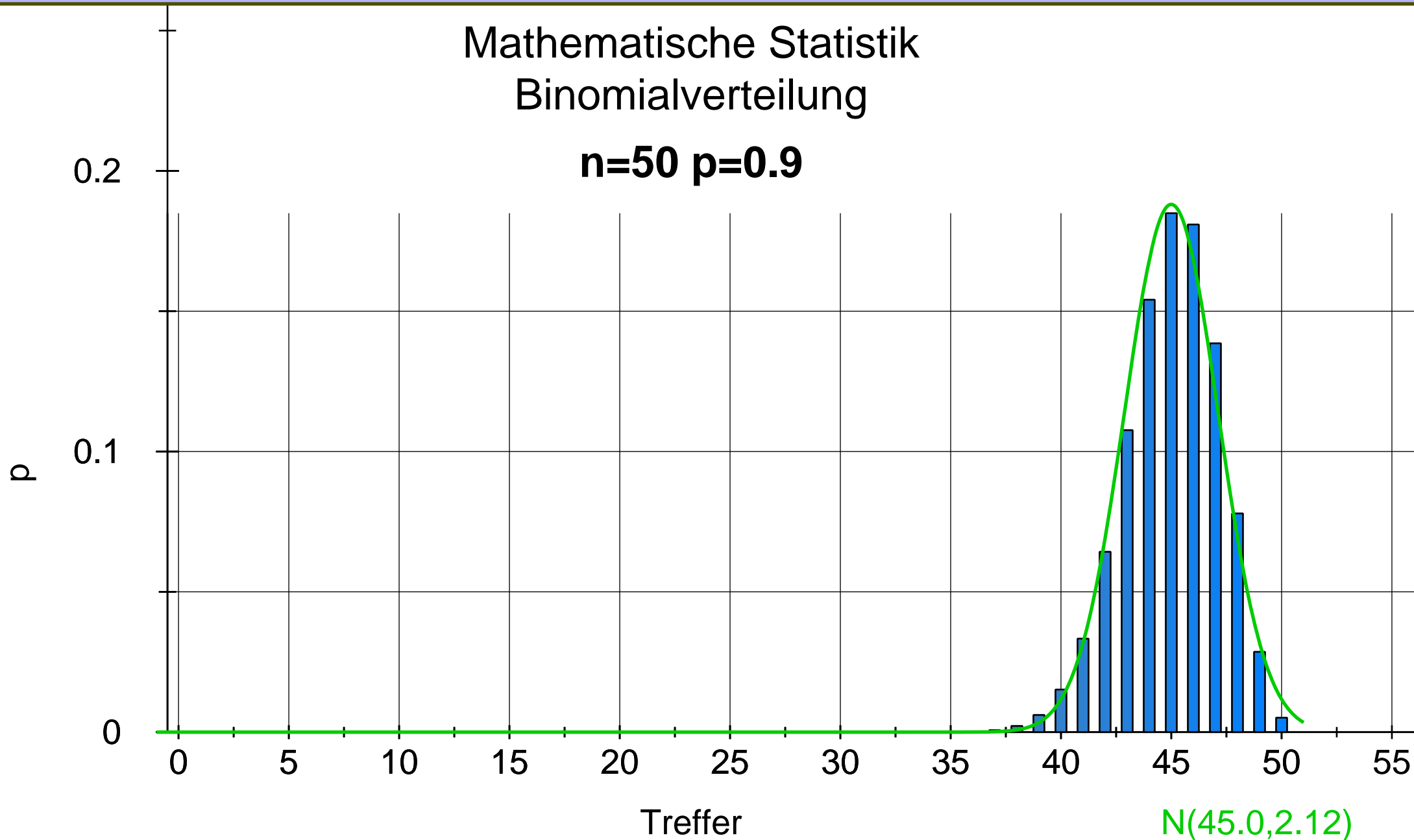
Binomialverteilung

n=50 p=0.88



Mathematische Statistik
Binomialverteilung

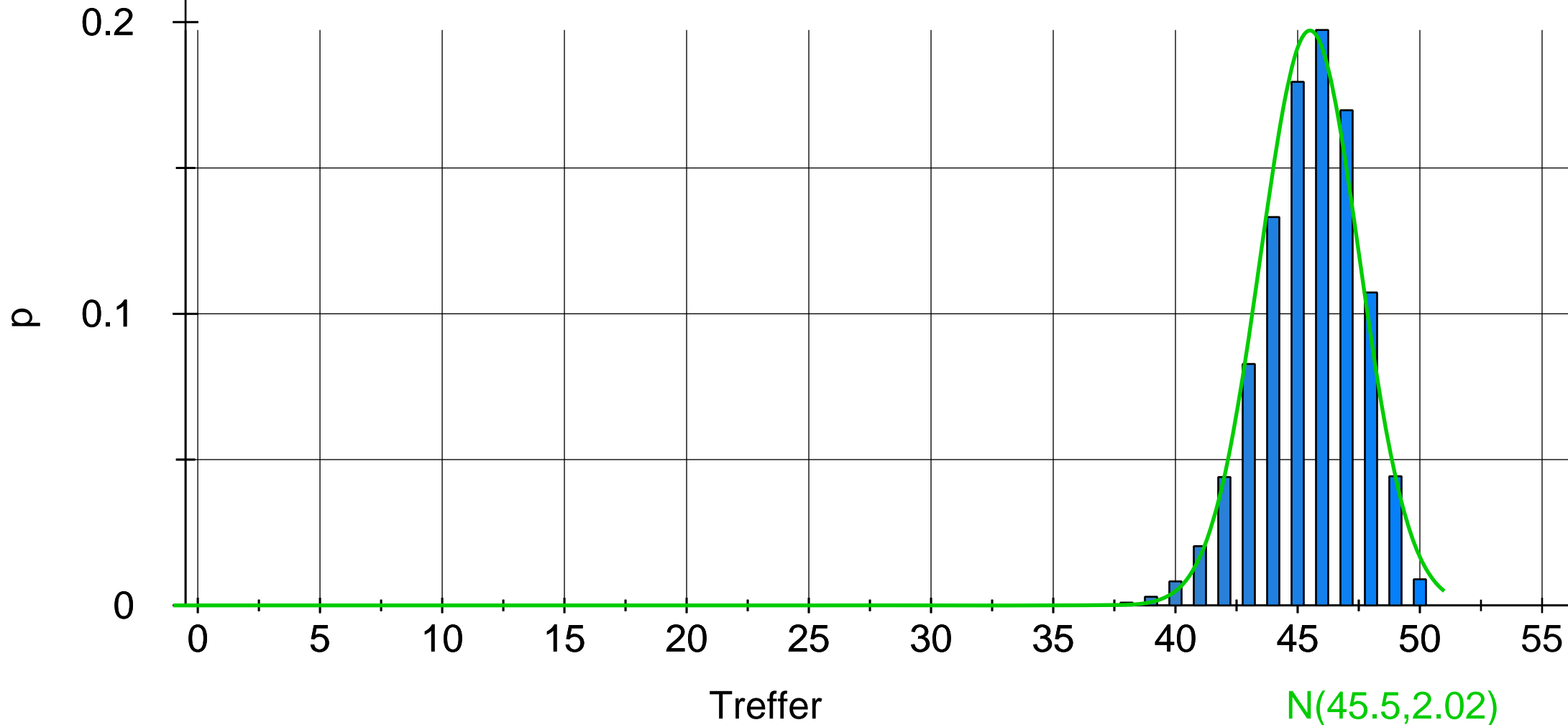
n=50 p=0.9



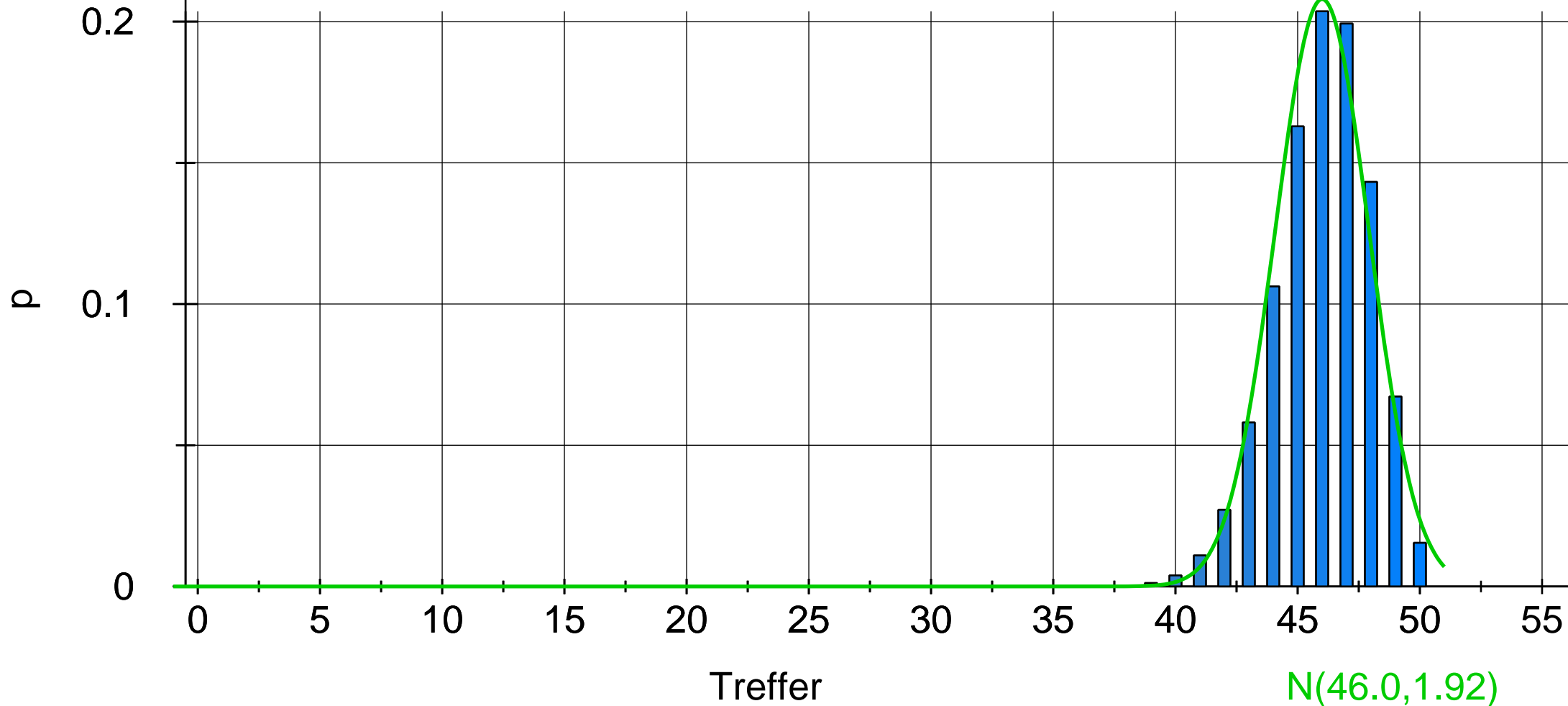
Mathematische Statistik

Binomialverteilung

n=50 p=0.91



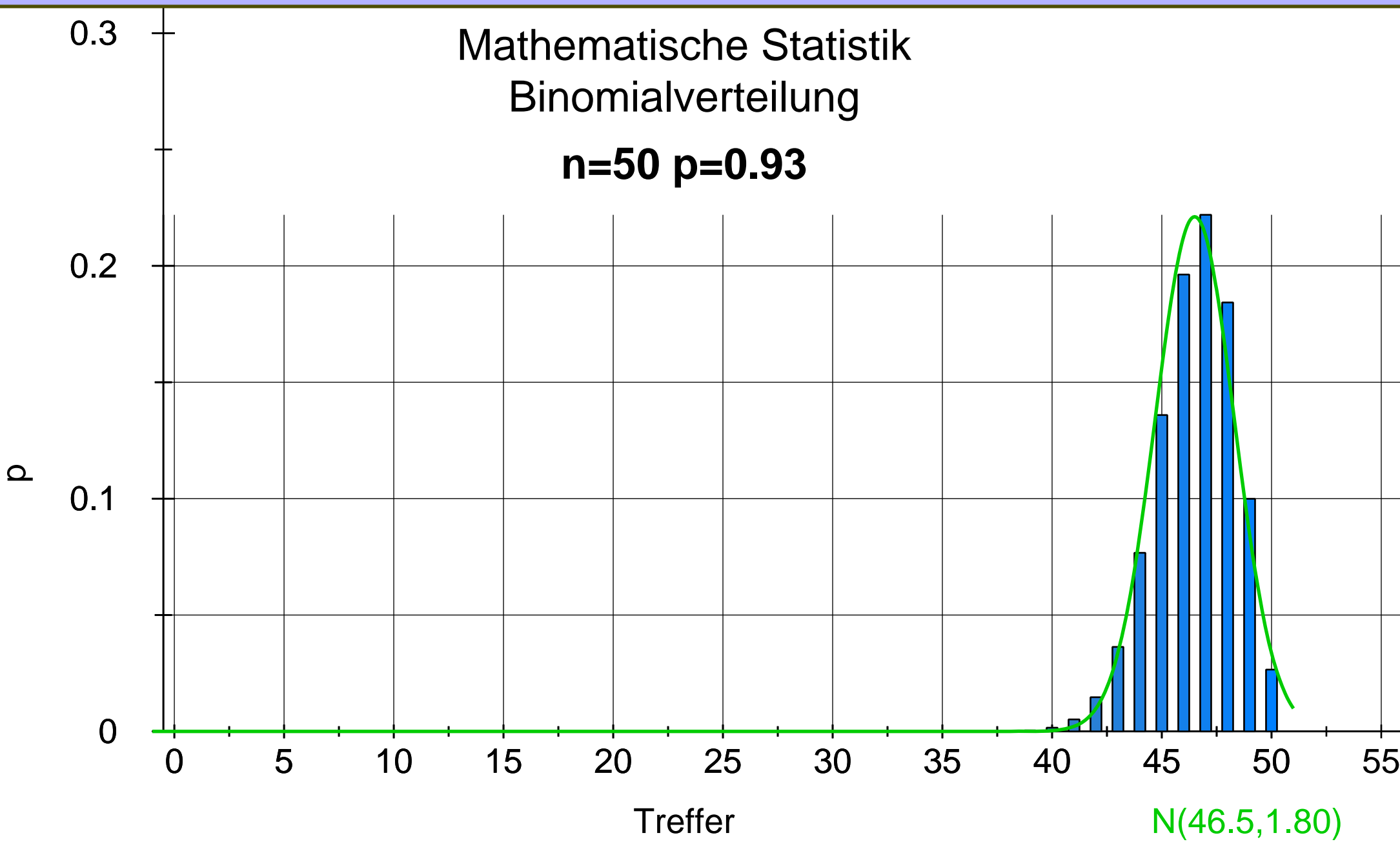
Mathematische Statistik
Binomialverteilung
n=50 p=0.92



$N(46.0, 1.92)$

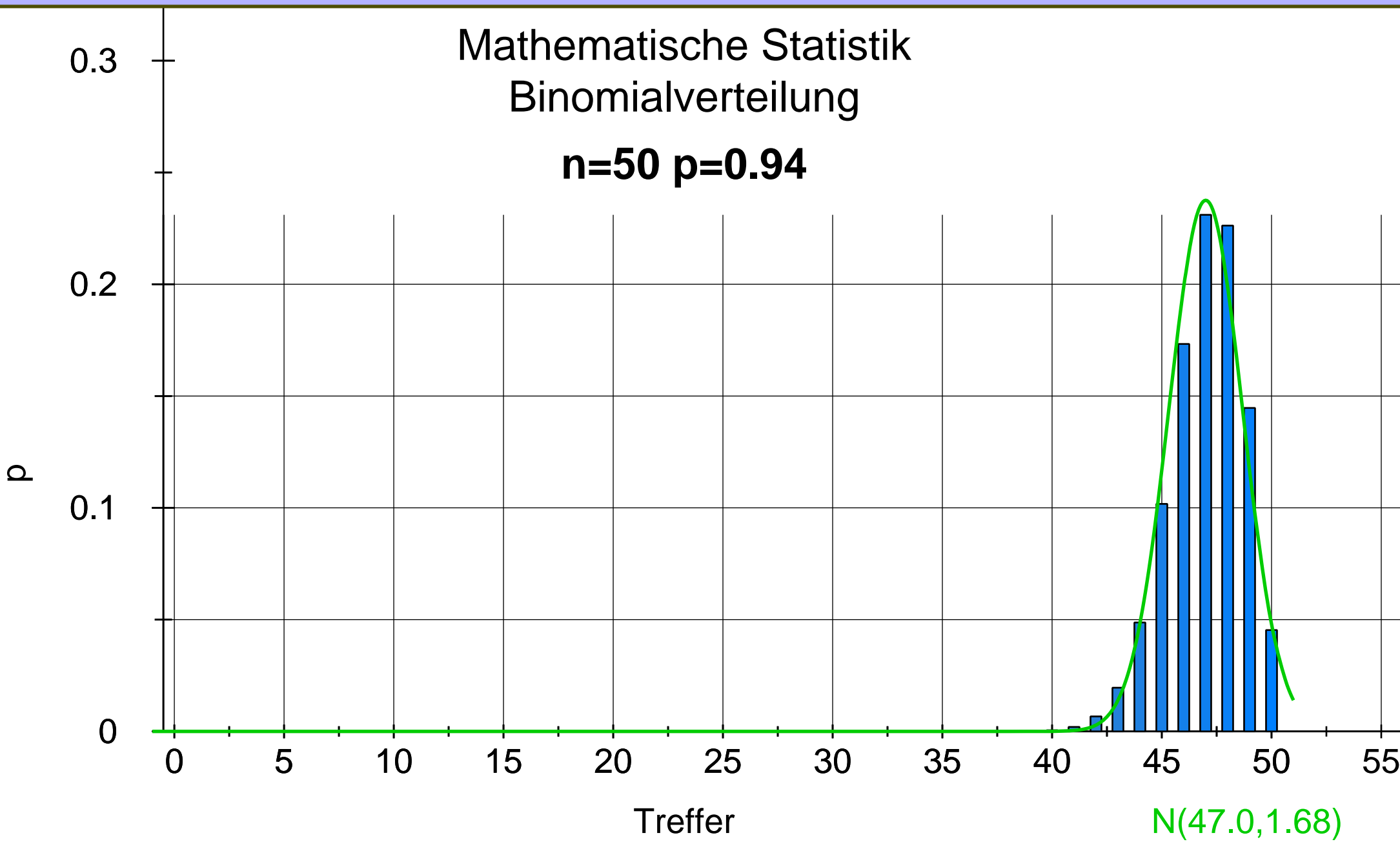
Mathematische Statistik
Binomialverteilung

n=50 p=0.93



Mathematische Statistik Binomialverteilung

n=50 p=0.94

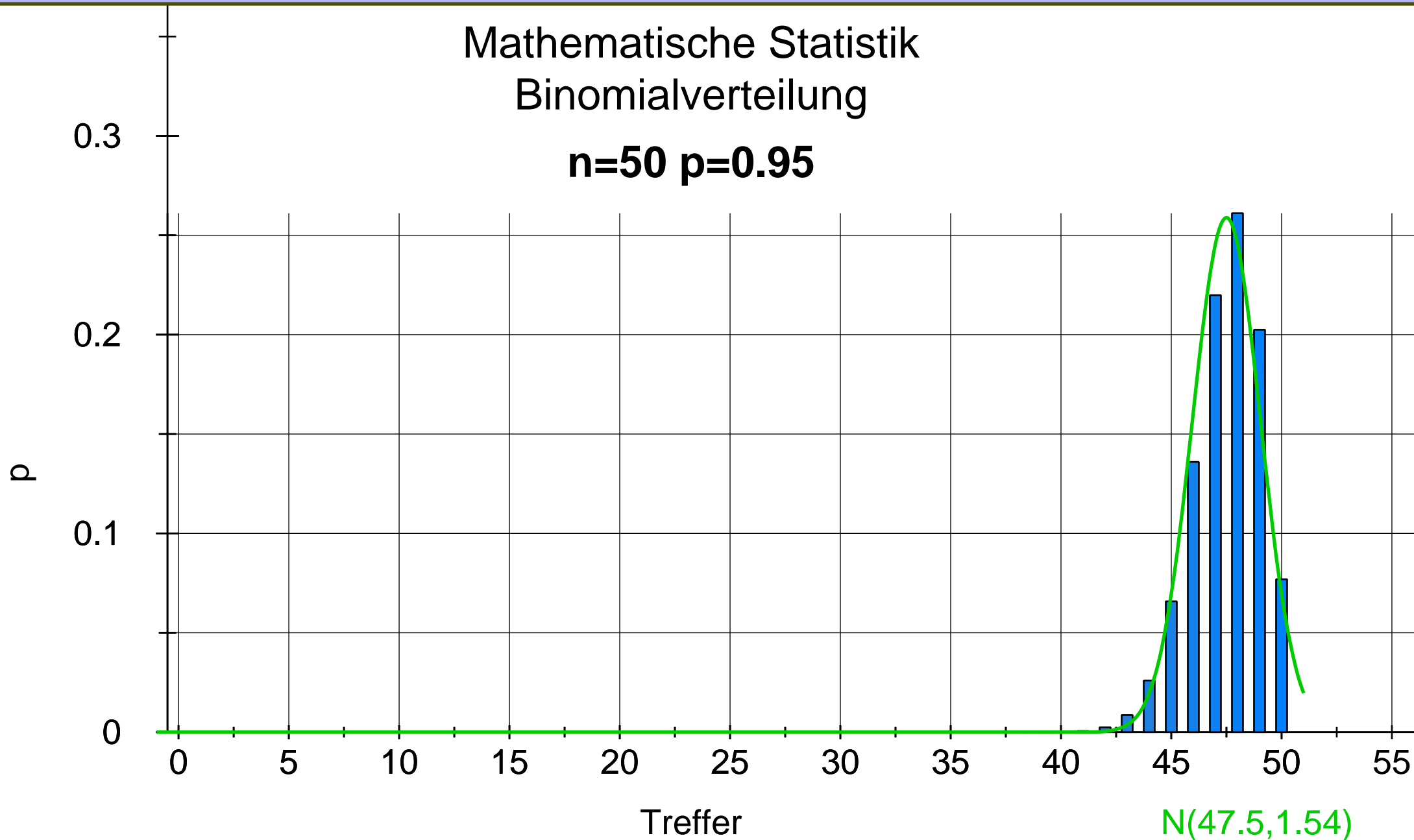


$N(47.0, 1.68)$

Mathematische Statistik

Binomialverteilung

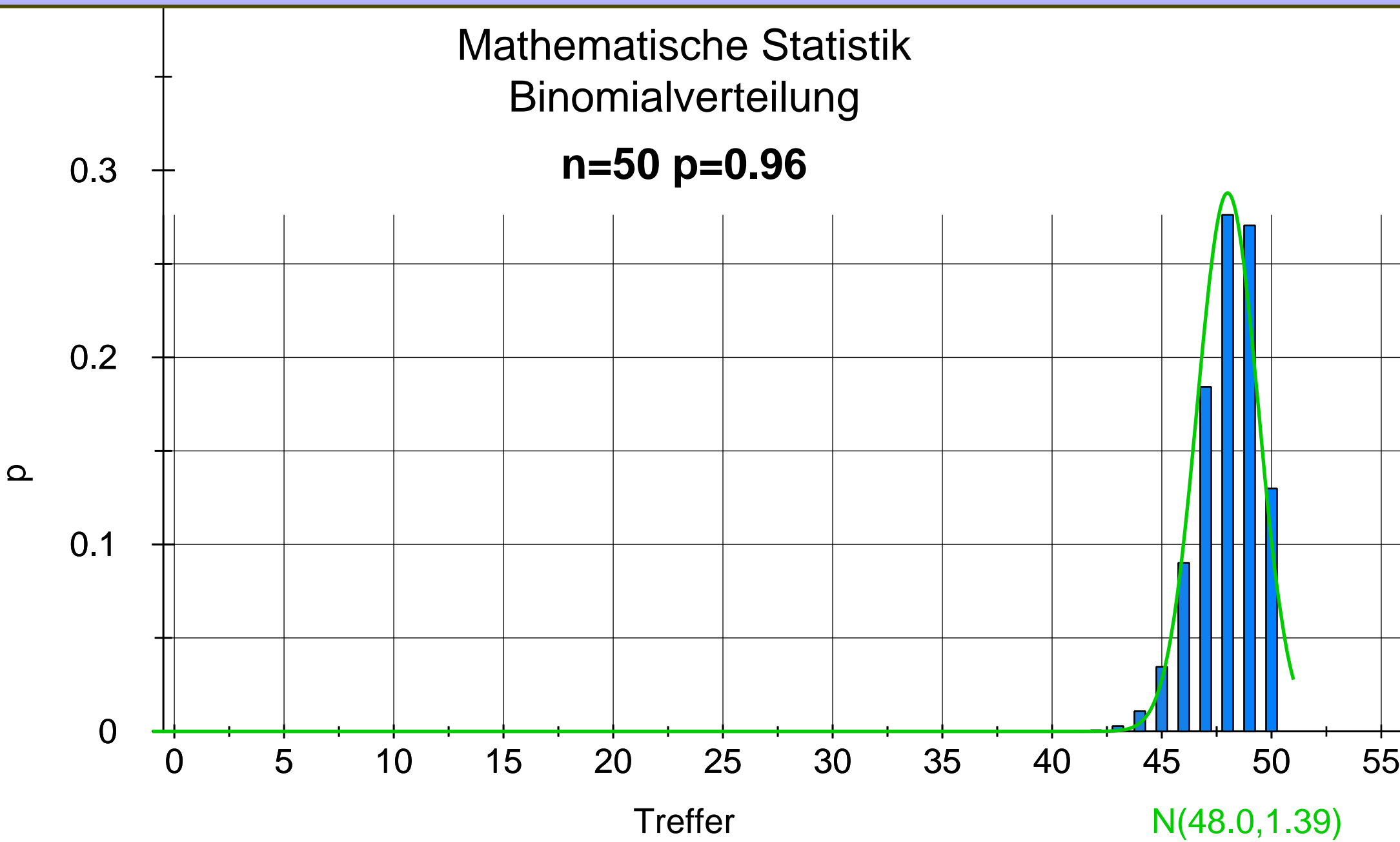
n=50 p=0.95



Mathematische Statistik

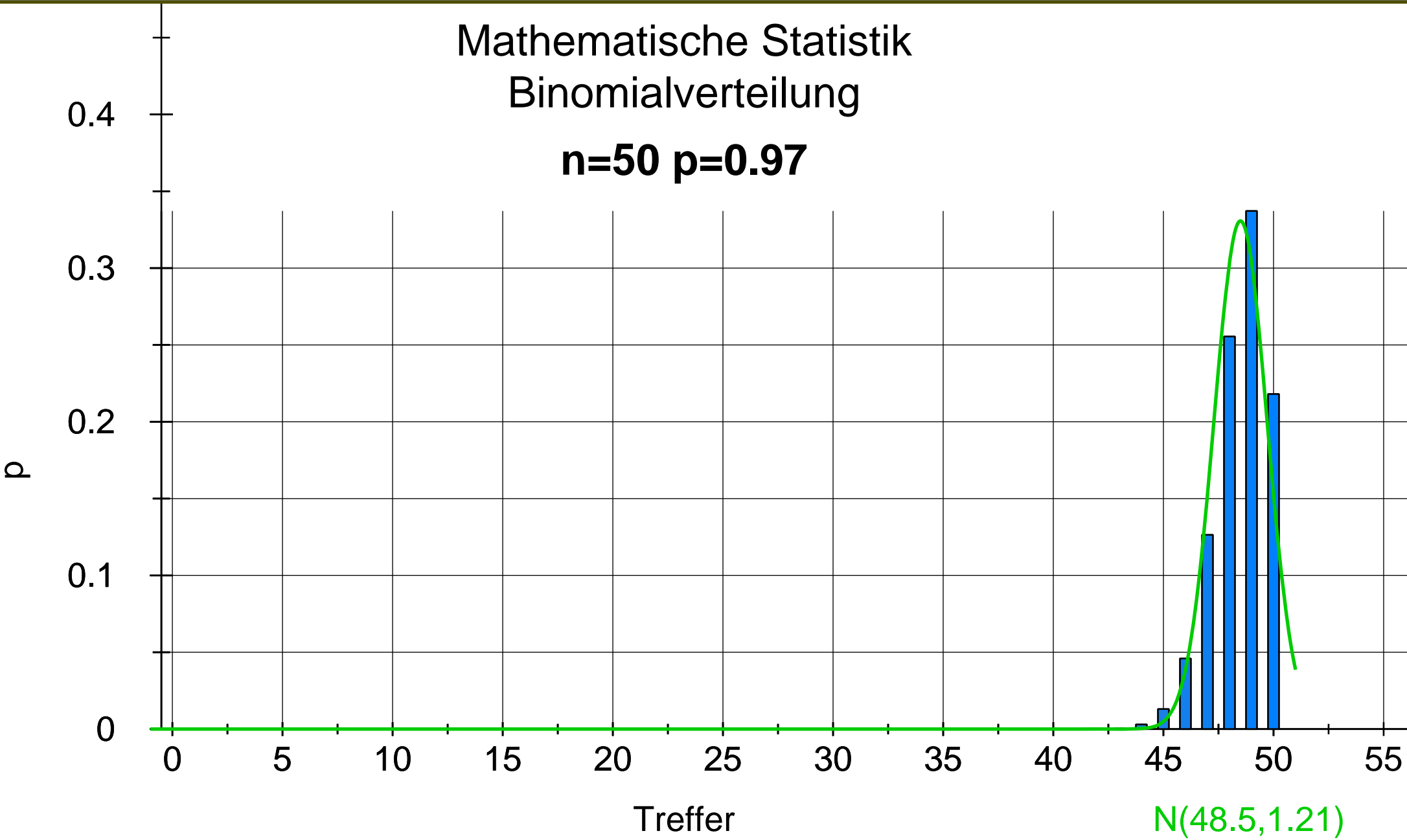
Binomialverteilung

n=50 p=0.96



$N(48.0, 1.39)$

Mathematische Statistik
Binomialverteilung
n=50 p=0.97

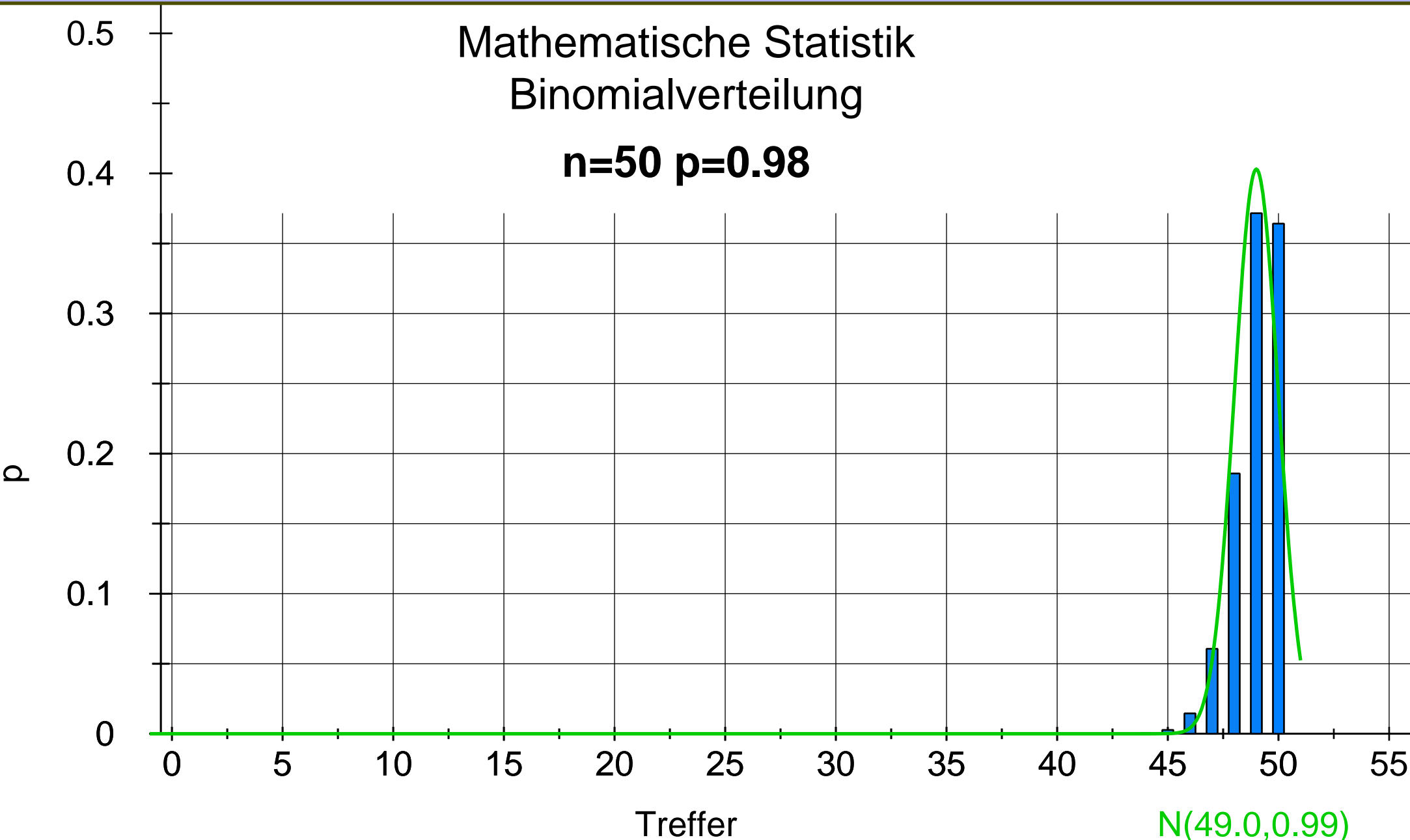


$N(48.5, 1.21)$

Mathematische Statistik

Binomialverteilung

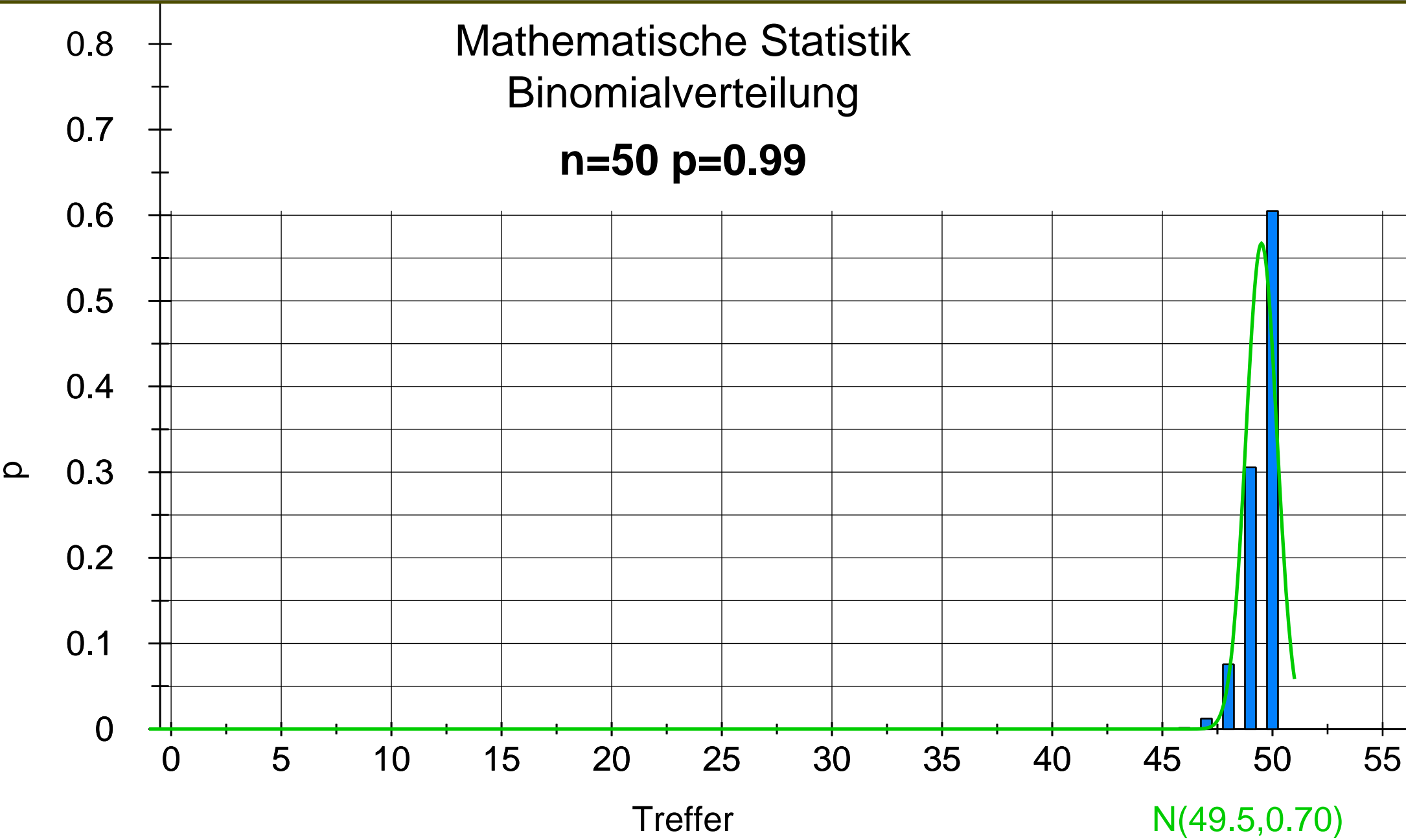
n=50 p=0.98



Mathematische Statistik

Binomialverteilung

n=50 p=0.99



Mathematische Statistik
Binomialverteilung
n=50 p=0.99

