Spatial Effects in the Analysis of Regional Income Convergence and Inequality

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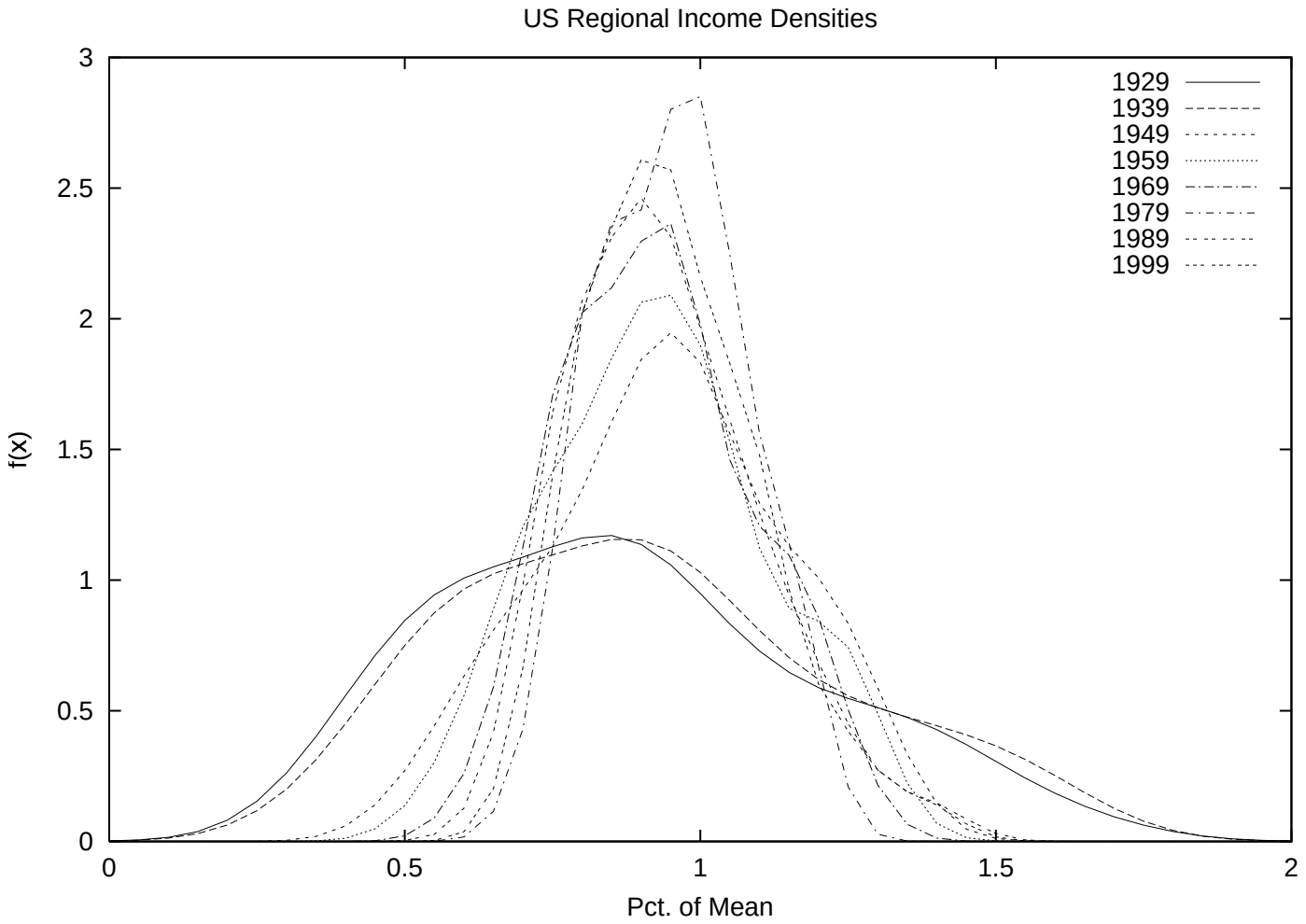
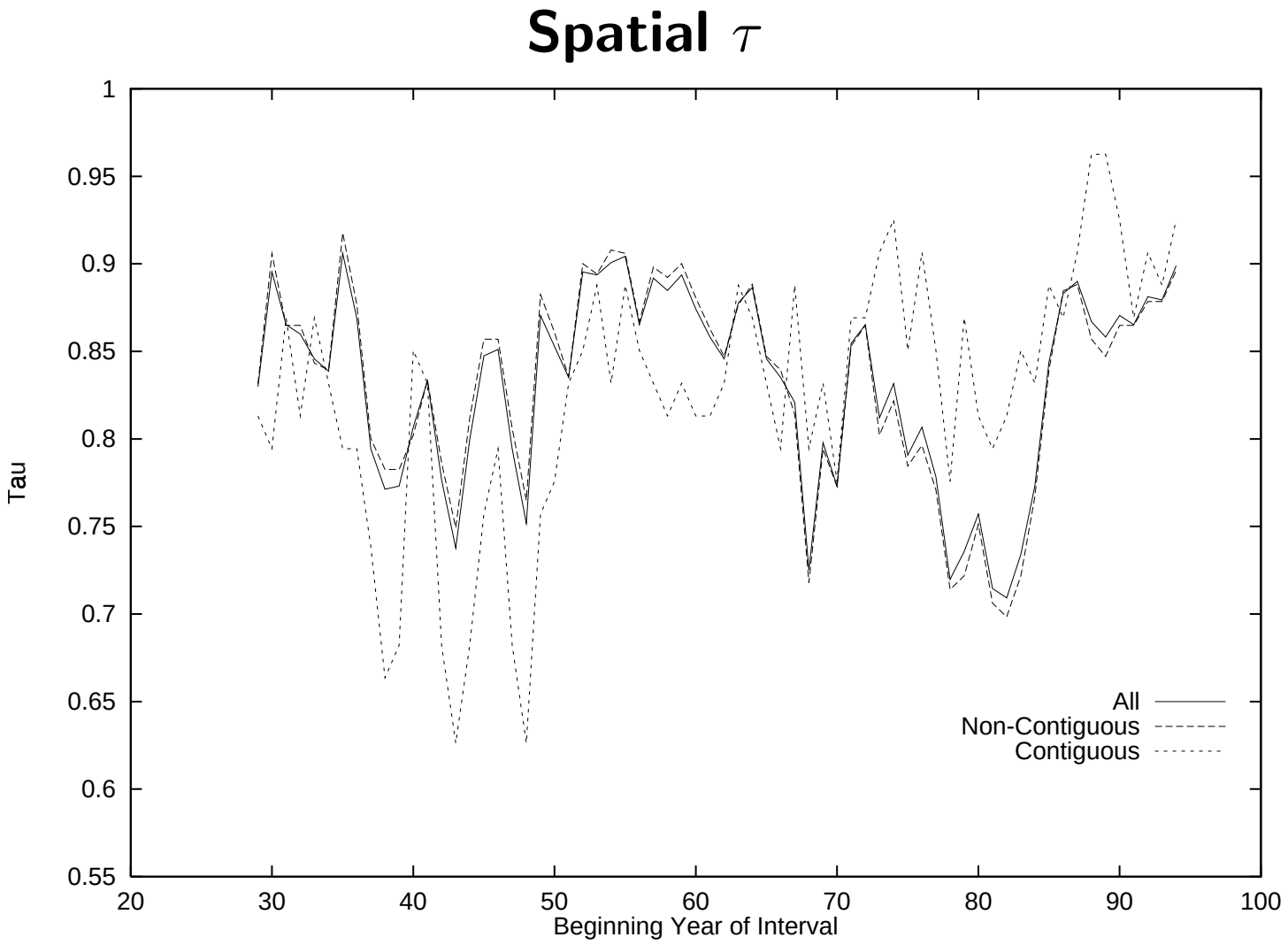
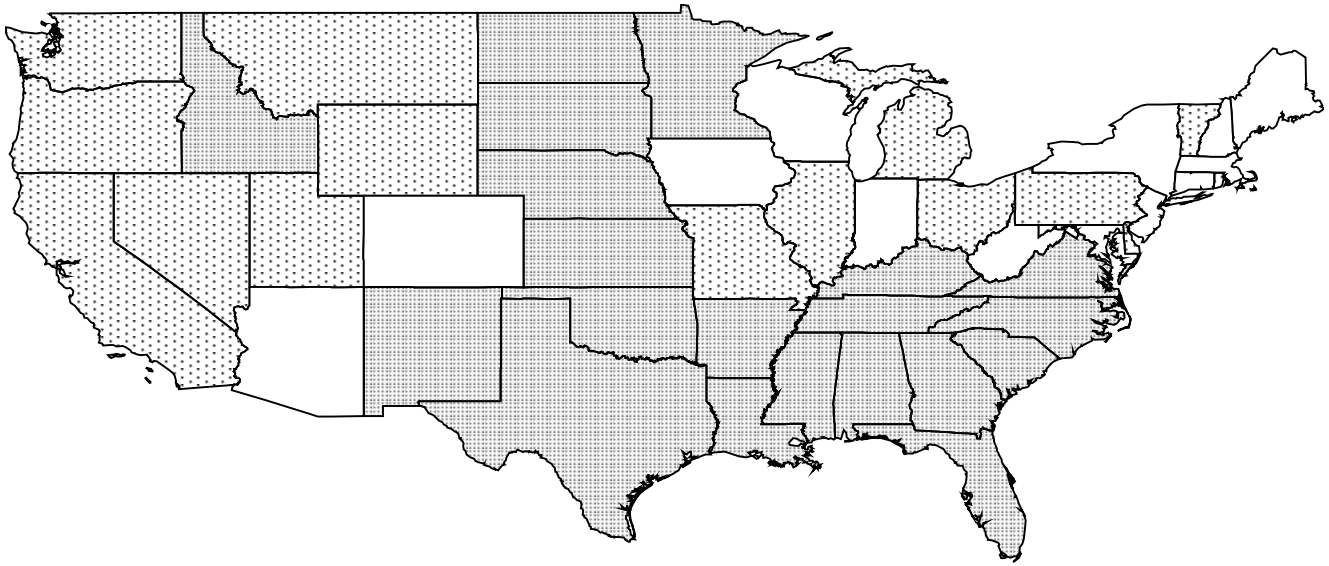

US Regional Income Densities
f(x)
Pct. of Mean
0
0.5
1
1.5
2
2.5
3
1929
1939
1949
1959
1969
1979
1989
1999


Spatial τ
Tau
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
20
30
40
50
60
70
80
90
100
Beginning Year of Interval
All
Non-Contiguous
Contiguous

Mobility



Income Mobility 1929-94

- Stationary
- Upwardly Mobile
- Downwardly Mobile

A list environment

A list environment

foo.

A list environment

foo. bar.

A list environment

foo. bar.

baz.

A list environment

foo. bar.

baz. qux.

An aligned equation

An aligned equation

$$\sum_{i=1}^{n} i \tag{1}$$

(2)

(3)

(4)

An aligned equation

$$\sum_{i=1}^{n} i \quad = \quad 1 + 2 + \cdots + (n-1) + n \tag{1}$$

(2)

(3)

(4)

An aligned equation

$$\begin{aligned}
\sum_{i=1}^{n} i &= 1 + 2 + \cdots + (n-1) + n && (1)\\
&= 1 + n + 2 + (n-1) + \cdots && (2)\\
& && (3)\\
& && (4)
\end{aligned}$$

An aligned equation

$$\begin{aligned}
\sum_{i=1}^{n} i &= 1 + 2 + \cdots + (n-1) + n && (1)\\
&= 1 + n + 2 + (n-1) + \cdots && (2)\\
&= (1+n) + \cdots + (1+n) && (3)\\
& && (4)
\end{aligned}$$

An aligned equation

$$
\begin{aligned}
\sum_{i=1}^{n} i &= 1 + 2 + \cdots + (n-1) + n && (1)\\
&= 1 + n + 2 + (n-1) + \cdots && (2)\\
&= \underbrace{(1+n) + \cdots + (1+n)}_{\times \frac{n}{2}} && (3)\\
& && (4)
\end{aligned}
$$

An aligned equation

$$
\begin{aligned}
\sum_{i=1}^{n} i &= 1 + 2 + \cdots + (n-1) + n && (1)\\
&= 1 + n + 2 + (n-1) + \cdots && (2)\\
&= \underbrace{(1+n) + \cdots + (1+n)}_{\times \frac{n}{2}} && (3)\\
&= \underline{\qquad (1+n) \qquad} && (4)
\end{aligned}
$$

An aligned equation

$$
\begin{aligned}
\sum_{i=1}^{n} i &= 1 + 2 + \cdots + (n-1) + n && (1)\\
&= 1 + n + 2 + (n-1) + \cdots && (2)\\
&= \underbrace{(1+n) + \cdots + (1+n)}_{\times \frac{n}{2}} && (3)\\
&= \frac{(1+n)\cdot n}{2} && (4)
\end{aligned}
$$

An array

An array

$$\begin{array}{cccccc} n & \log n & n \log n & n^2 & 2^n \end{array}$$

An array

n	$\log n$	$n \log n$	n^2	2^n
0				

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—			

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—		

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1				

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0			

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0		

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2				

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1			

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2		

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3				

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6			

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8		

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4				

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4	2			

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4	2	8		

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4	2	8	16	

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4	2	8	16	16

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4	2	8	16	16
5				

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4	2	8	16	16
5	2.3			

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4	2	8	16	16
5	2.3	11.6		

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4	2	8	16	16
5	2.3	11.6	25	

An array

n	$\log n$	$n \log n$	n^2	2^n
0	—	—	0	1
1	0	0	1	2
2	1	2	4	4
3	1.6	4.8	9	8
4	2	8	16	16
5	2.3	11.6	25	32

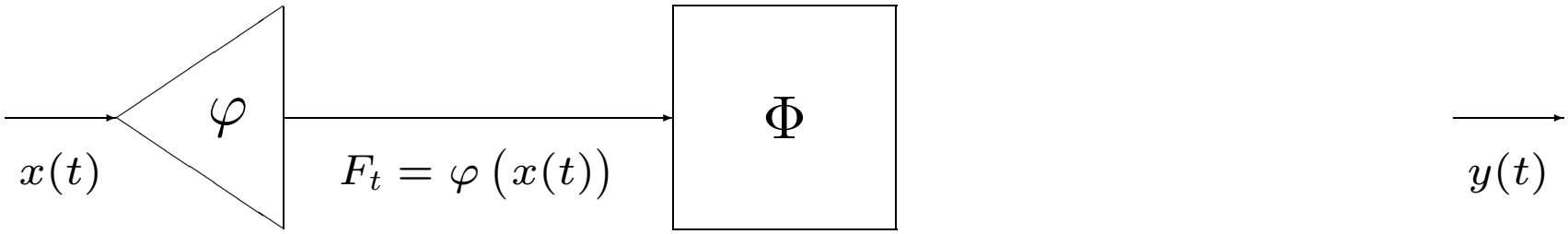
A picture

A picture

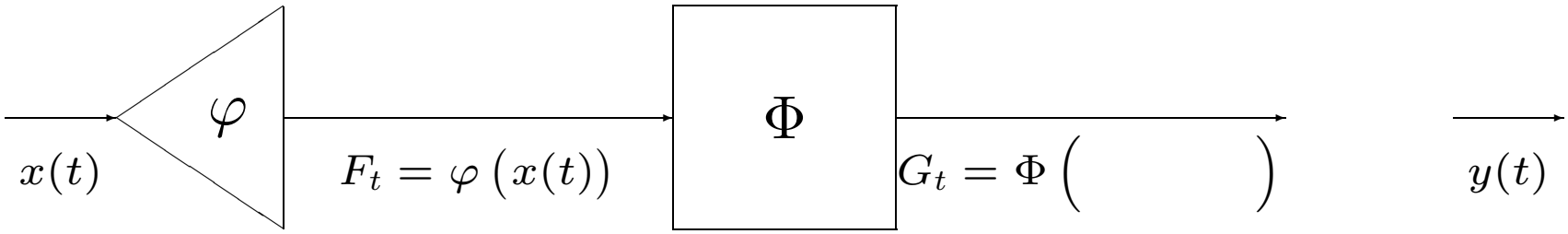
A picture

A picture

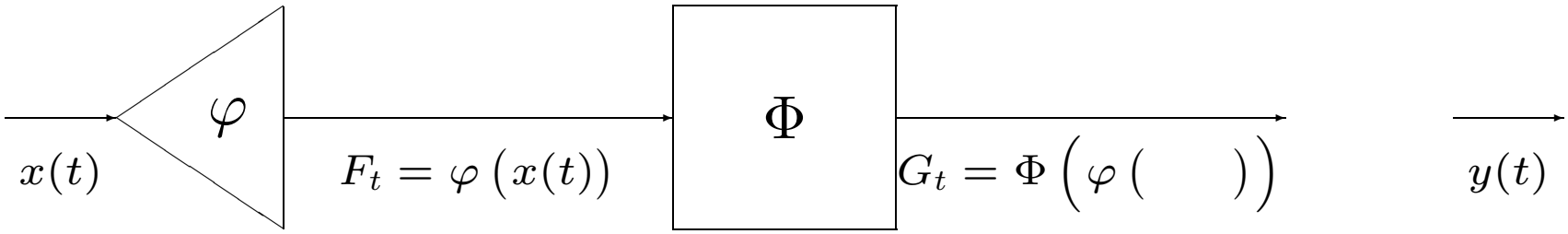
A picture



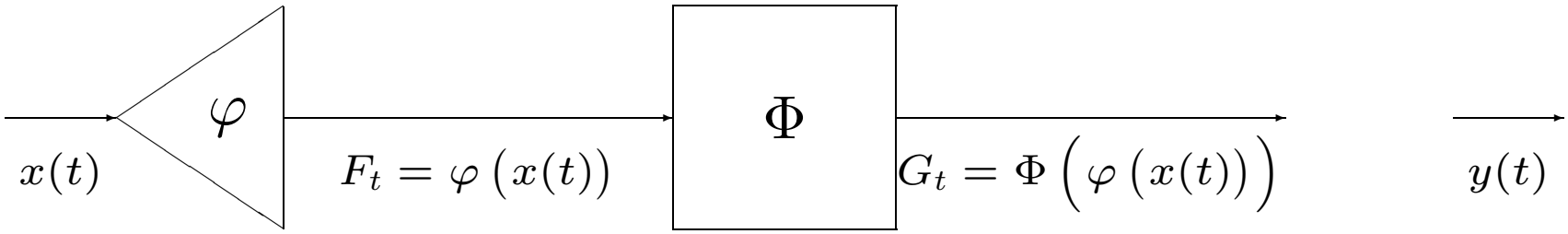
A picture



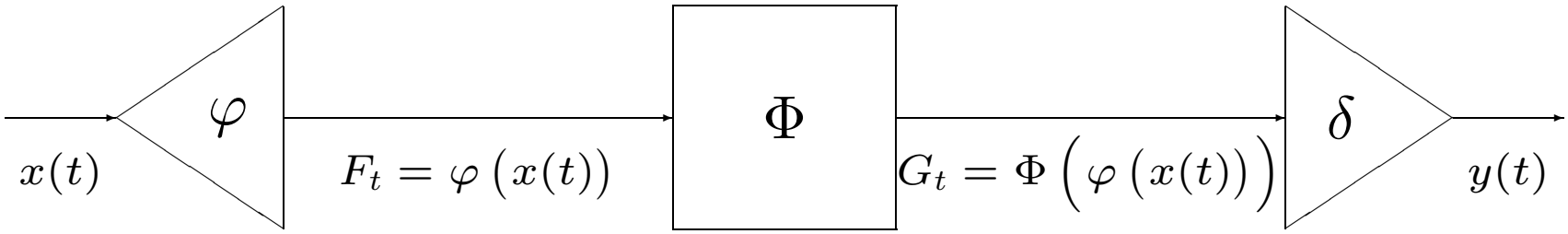
A picture


φ
Φ
$x(t)$
$F_t = \varphi\left(x(t)\right)$
$G_t = \Phi\left(\varphi\left(\quad\right)\right)$
$y(t)$

A picture


φ
Φ
$x(t)$
$F_t = \varphi\left(x(t)\right)$
$G_t = \Phi\left(\varphi\left(x(t)\right)\right)$
$y(t)$

A picture


φ
Φ
δ
$x(t)$
$F_t = \varphi\left(x(t)\right)$
$G_t = \Phi\left(\varphi\left(x(t)\right)\right)$
$y(t)$