Macrovsa experiments results

Sympolic reduction

[I]: [{b y: c x: [a b]} {b y: c x: [b a]}]
[P]: [B_(c)([a b])_<1.4±0.027> B_(c)([b a])_<1.4±0.027>]
[R]: [B_(c)(b_<2±0.019>)_<2±0.038> B_(c)(a_<2±0.019>)_<2±0.038>]

[I]: [[{name: a tau: 0.5 sigma: 0.1} [ ]] {name: a tau: 0.5 sigma: 0.1}]
[P]: [a_<1±0.2>]
[R]: a_<1±0.2>

[I]: {b y: a x: {u y: a x: [{name: c tau: 2 sigma: 0.1}]}
[P]: B_(a)(B_(a~)([c_<2±0.1>])_<2±0.14>)_<2±0.18>
[R]: c_<4±0.32>

[I]: {b y: c x: {b y: c x: {b y: c x: {u y: c x: {u y: c x: {u y: c x: a}}}}}}
[P]: B_(c)(B_(c)(B_(c)(B_(c~)(B_(c~)(B_(c~)(a)_<1±0.019>)_<1±0.038>)_<1±0.058>)_<1±0.077>)_<1±0.096>)_<1±0.12>
[R]: a_<1±0.35>

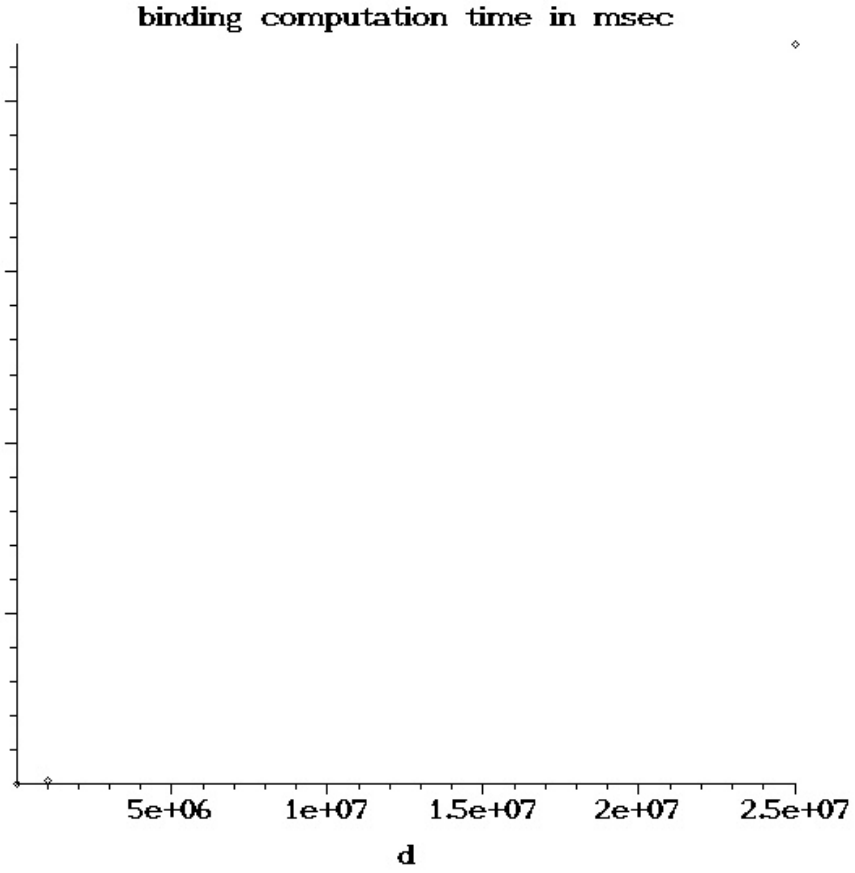
Mesoscopic versus macroscopic noise comparison

Dimension:	100	400	1024	2500	4096	10000	1000000	25000000
Mesoscopic estimation over 100 samples								
$\mathbf{B_y x \cdot x}$	0.0052±0.11	0.0039±0.052	-0.002±0.029	3.2e-05±0.023	-0.00026±0.017	0.0013±0.011	3.6e-05±0.00096	-2.7e-05±0.0002
$\mathbf{B_y \sim B_y x \cdot x}$	-0.03±0.21	-0.0071±0.12	0.00023±0.074	0.0023±0.045	-0.0014±0.038	0.0016±0.023	-0.00013±0.0024	4.4e-05±0.00042
$\mathbf{B_y y \cdot y}$	0.022±0.14	-0.0022±0.074	0.0041±0.045	-0.0018±0.029	0.0011±0.022	-0.00021±0.014	-1.8e-05±0.0013	3.8e-05±0.00027
$\mathbf{B_y \sim B_y y \cdot y}$	-0.03±0.21	-0.0071±0.12	0.00023±0.074	0.0023±0.045	-0.0014±0.038	0.0016±0.023	-0.00013±0.0024	4.4e-05±0.00042
Macroscopic bias and standard-deviation								
$\mathbf{B_y x \cdot x}$	0±0.11	0±0.054	0±0.038	0±0.029	0±0.024	0±0.019	0±0.005	0±0.0021
$\mathbf{B_y \sim B_y x \cdot x}$	0±0.34	0±0.16	0±0.12	0±0.086	0±0.073	0±0.056	0±0.015	0±0.0062
$\mathbf{B_y y \cdot y}$	0±0.11	0±0.054	0±0.038	0±0.029	0±0.024	0±0.019	0±0.005	0±0.0021
$\mathbf{B_y \sim B_y y \cdot y}$	0±0.34	0±0.16	0±0.12	0±0.086	0±0.073	0±0.056	0±0.015	0±0.0062
Standard-deviation macroscopic/microscopic ratio								
$\mathbf{B_y x \cdot x}$	0.99	1	1.3	1.3	1.5	1.7	5.2	11
$\mathbf{B_y \sim B_y x \cdot x}$	1.6	1.3	1.5	1.9	1.9	2.5	6.2	15
$\mathbf{B_y y \cdot y}$	0.82	0.73	0.86	0.97	1.1	1.3	3.9	7.6
$\mathbf{B_y \sim B_y y \cdot y}$	1.6	1.3	1.5	1.9	1.9	2.5	6.2	15

Binding magnitudes

$\mathbf{\|\|B_y x\|\|^2}$	1±0.14	1±0.076	1±0.048	1±0.028	1±0.021	1±0.015	1±0.0013	1±0.00029
$\mathbf{\|\|B_y \sim B_y x\|\|^2}$	2.1±0.51	2.1±0.24	2±0.15	2±0.11	2±0.078	2±0.047	2±0.0048	2±0.00097
$\mathbf{\|\|B_y y\|\|^2}$	2.1±0.21	2±0.092	2±0.063	2±0.045	2±0.031	2±0.019	2±0.002	2±0.00042
$\mathbf{\|\|B_y \sim B_y y\|\|^2}$	5.4±1.4	5.2±0.56	5.2±0.39	5.1±0.28	5.1±0.19	5±0.12	5±0.012	5±0.0026

Binding computation durations



Bundling computation durations