

```

In[ ]:= SetDirectory["C:\\drorbn\\AcademicPensieve\\Talks\\Nara-2308"];
{handout = Import["Cars.png"]};
{iX, iY} = ImageDimensions[handout]

Out[ ]:=
{6800, 8800}

In[ ]:= {vX, vY} = {25.5, 11};
views = "var views = [
  [0.171, 0.089, 10.196, 1.057, \"T&A\"],
  [0, 0, 25.5, 11, \"All\"],
  [9.382, 0.058, 12.456, 0.287, \"web\"],
  [0.197, 3.255, 6.459, 3.555, \"Acknowledgement\"],
  [0.154, 0.949, 6.462, 2.16, \"Strong and Fast\"],
  [0.164, 2.066, 6.445, 2.548, \"Homomorphic\"],
  [0.2, 2.469, 6.468, 3.222, \"Why homomorphic?\"],
  [6.209, 0.228, 11.167, 0.669, \"Formulas First!\"],
  [6.138, 0.229, 12.545, 1.328, \"Draw and Mark\"],
  [6.205, 0.87, 12.46, 1.767, \"A & G\"],
  [6.204, 0.257, 12.43, 2.438, \"A\"],
  [6.139, 2.358, 11.759, 3.171, \"G\"],
  [6.212, 3.08, 12.465, 3.559, \"Alexander Poly\"],
  [10.959, 1.606, 12.479, 3.158, \"Old guys\"],
  [6.228, 3.477, 12.446, 4.326, \"rho_1\"],
  [6.209, 0.228, 11.167, 0.669, \"Program Second!\"],
  [12.93, 0.061, 18.295, 1.02, \"Preliminaries\"],
  [12.885, 0.973, 18.709, 2.675, \"Program\"],
  [12.855, 2.616, 18.929, 4.245, \"The first few knots\"],
  [18.931, 0.076, 25.264, 1.446, \"GST48, marked\"],
  [18.877, 1.383, 25.019, 3.351, \"GST48, computed\"],
  [18.962, 3.346, 25.283, 5.01, \"Strong\"],
  [4.972, 4.22, 12.57, 5.371, \"Cars, Interchanges, and Traffic Counters\"],
  [14.074, 4.222, 17.944, 4.919, \"Lightning McQueen\"],
  [0.187, 5.536, 6.408, 6.387, \"The meaning of Green\"],
  [0.147, 6.265, 6.457, 7.105, \"Proof and Bonus\"],
  [0.141, 7.012, 6.459, 7.904, \"Bureau for R3\"],
  [0.138, 7.752, 6.451, 8.546, \"The logic\"],
  [0.195, 8.075, 6.44, 9.717, \"R3 for rho1\"],
  [0.126, 9.648, 6.439, 10.467, \"R1 Invariance\"],
  [0.199, 10.432, 6.45, 10.854, \"Topology Hat\"],
  [6.21, 5.521, 12.452, 6.273, \"Spy a Heisenberg\"],
  [6.218, 6.174, 12.475, 7.229, \"s12+eps\"],
  [6.157, 6.582, 12.479, 7.709, \"QU\"],
  [6.177, 7.619, 12.45, 8.436, \"Push to H\"],
  [6.214, 8.34, 12.471, 9.2, \"Expanding in eps\"],
  [6.174, 9.133, 12.426, 9.865, \"Homomorphic and more\"],
  [6.162, 9.759, 12.577, 10.111, \"Rozansky-Overbay\"],
  [6.17, 10.04, 12.493, 10.697, \"Insanity, Homework\"],

```

```
[6.12, 10.609, 12.441, 10.865, \"Genus\"],
[12.736, 5.474, 25.385, 10.881, \"rho_d\"],
[12.876, 5.532, 19.23, 5.88, \"Pairing\"],
[12.841, 5.812, 19.348, 7.04, \"Baby Theorem\"],
[12.902, 6.988, 19.254, 8.005, \"The rho_d Theorem\"],
[12.834, 7.961, 19.353, 9.558, \"Data\"],
[19.022, 5.499, 25.255, 7.128, \"More Data\"],
[18.998, 7.073, 25.269, 8.267, \"Program\"],
[19.035, 8.158, 25.146, 9.562, \"More program\"],
[12.935, 9.624, 25.318, 10.857, \"Runs\"]
];
ToExpression@StringReplace[{"[" -> "\", "]" -> "}"]@StringDrop[views, 4]
```

```
In[ ]:= views[[1, 1 ;; 4]]
```

```
Out[ ]=
{0.171, 0.089, 10.196, 1.057}
```

```
In[ ]:= view[x0_, y0_, x1_, y1_] :=
```

```
ImageTrim[handout, Round[{{ $\frac{iX x0}{vX}, \frac{iY (vY - y1)}{vY}$ }, { $\frac{iX x1}{vX}, \frac{iY (vY - y0)}{vY}$ }}]]]
```

```
view@@views[[3, 1 ;; 4]]
```

```
Out[ ]=
```

$\omega\epsilon\beta := \text{http://drorbn.net/na23}$
variants More at $\omega\epsilon\beta/\text{APAI}$



```
In[ ]:= Table[
v = view@@views[[k, 1 ;; 4]];
Export[
IntegerString[k, 10, 2] <> ".png",
ImageResize[v, {Min[1200, Max@@ImageDimensions[v]}]]
],
{k, Length[views]}
]
```

```
Out[ ]=
{01.png, 02.png, 03.png, 04.png, 05.png, 06.png, 07.png, 08.png, 09.png,
10.png, 11.png, 12.png, 13.png, 14.png, 15.png, 16.png, 17.png, 18.png, 19.png,
20.png, 21.png, 22.png, 23.png, 24.png, 25.png, 26.png, 27.png, 28.png, 29.png,
30.png, 31.png, 32.png, 33.png, 34.png, 35.png, 36.png, 37.png, 38.png, 39.png,
40.png, 41.png, 42.png, 43.png, 44.png, 45.png, 46.png, 47.png, 48.png, 49.png}
```