

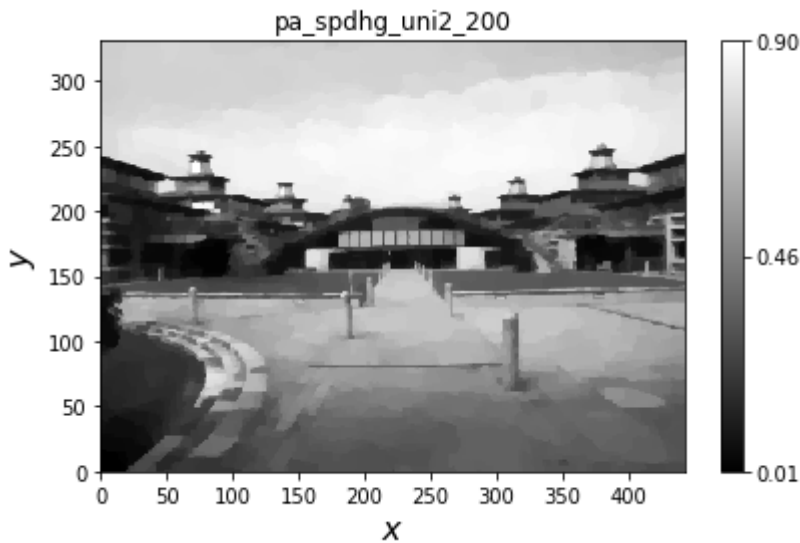
<Figure size 432x288 with 0 Axes>

/home/dylan/anaconda3/lib/python3.7/site-packages/skimage/util/dtype.py:141: UserWarning:  
Possible precision loss when converting from float64 to uint16

```
.format(dtypeobj_in, dtypeobj_out))
```

```
iter = 82, Time elapsed = 3.624 s  
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iter = 88, Time elapsed = 3.758 s  
iter = 90, Time elapsed = 3.801 s  
iter = 92, Time elapsed = 3.843 s  
iter = 94, Time elapsed = 3.884 s  
iter = 96, Time elapsed = 3.928 s  
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iter = 102, Time elapsed = 4.051 s  
iter = 104, Time elapsed = 4.093 s  
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iter = 118, Time elapsed = 4.386 s  
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iter = 124, Time elapsed = 4.513 s  
iter = 126, Time elapsed = 4.553 s  
iter = 128, Time elapsed = 4.594 s  
iter = 130, Time elapsed = 4.635 s  
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iter = 164, Time elapsed = 5.358 s  
iter = 166, Time elapsed = 5.400 s  
iter = 168, Time elapsed = 5.441 s  
iter = 170, Time elapsed = 5.482 s  
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iter = 174, Time elapsed = 5.564 s
```

iter = 176, Time elapsed = 5.607 s  
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 iter = 180, Time elapsed = 5.688 s  
 iter = 182, Time elapsed = 5.731 s  
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 iter = 186, Time elapsed = 5.817 s  
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 iter = 190, Time elapsed = 5.899 s  
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 iter = 194, Time elapsed = 5.992 s  
 iter = 196, Time elapsed = 6.036 s  
 iter = 198, Time elapsed = 6.077 s  
 iter = 200, Time elapsed = 6.118 s



<Figure size 432x288 with 0 Axes>

/home/dylan/anaconda3/lib/python3.7/site-packages/skimage/util/dtype.py:141: UserWarning:  
Possible precision loss when converting from float64 to uint16

.format(dtypeobj\_in, dtypeobj\_out))

iter = 202, Time elapsed = 6.583 s  
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 iter = 208, Time elapsed = 6.712 s  
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 iter = 212, Time elapsed = 6.800 s  
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 iter = 216, Time elapsed = 6.884 s  
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 iter = 220, Time elapsed = 6.970 s  
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 iter = 224, Time elapsed = 7.051 s  
 iter = 226, Time elapsed = 7.091 s  
 iter = 228, Time elapsed = 7.134 s  
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 iter = 238, Time elapsed = 7.342 s  
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iter = 242, Time elapsed = 7.423 s  
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iter = 250, Time elapsed = 7.592 s  
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iter = 256, Time elapsed = 7.720 s  
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iter = 264, Time elapsed = 7.884 s  
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iter = 272, Time elapsed = 8.050 s  
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iter = 294, Time elapsed = 8.509 s  
iter = 296, Time elapsed = 8.550 s  
iter = 298, Time elapsed = 8.591 s  
iter = 300, Time elapsed = 8.633 s  
iter = 302, Time elapsed = 8.674 s  
iter = 304, Time elapsed = 8.721 s  
iter = 306, Time elapsed = 8.761 s  
iter = 308, Time elapsed = 8.802 s  
iter = 310, Time elapsed = 8.842 s  
iter = 312, Time elapsed = 8.883 s  
iter = 314, Time elapsed = 8.928 s  
iter = 316, Time elapsed = 8.968 s  
iter = 318, Time elapsed = 9.009 s  
iter = 320, Time elapsed = 9.050 s  
iter = 322, Time elapsed = 9.091 s  
iter = 324, Time elapsed = 9.138 s  
iter = 326, Time elapsed = 9.179 s  
iter = 328, Time elapsed = 9.222 s  
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iter = 336, Time elapsed = 9.388 s  
iter = 338, Time elapsed = 9.433 s  
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iter = 344, Time elapsed = 9.557 s

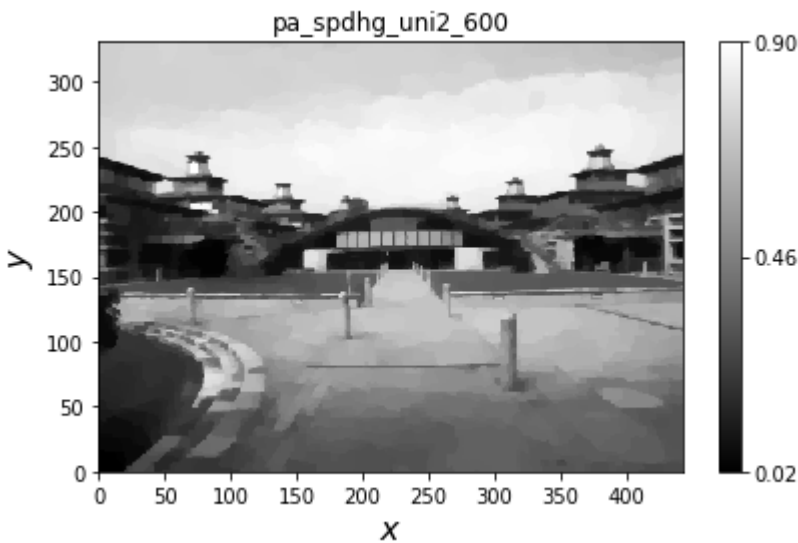
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iter = 360, Time elapsed = 9.898 s  
iter = 362, Time elapsed = 9.941 s  
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iter = 366, Time elapsed = 10.026 s  
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iter = 378, Time elapsed = 10.276 s  
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iter = 402, Time elapsed = 10.785 s  
iter = 404, Time elapsed = 10.830 s  
iter = 406, Time elapsed = 10.871 s  
iter = 408, Time elapsed = 10.911 s  
iter = 410, Time elapsed = 10.952 s  
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iter = 416, Time elapsed = 11.074 s  
iter = 418, Time elapsed = 11.119 s  
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iter = 550, Time elapsed = 13.944 s  
iter = 552, Time elapsed = 13.985 s

```

iter = 554, Time elapsed = 14.029 s
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iter = 558, Time elapsed = 14.109 s
iter = 560, Time elapsed = 14.149 s
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iter = 586, Time elapsed = 14.690 s
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iter = 590, Time elapsed = 14.779 s
iter = 592, Time elapsed = 14.820 s
iter = 594, Time elapsed = 14.861 s
iter = 596, Time elapsed = 14.904 s
iter = 598, Time elapsed = 14.945 s
iter = 600, Time elapsed = 14.985 s

```



<Figure size 432x288 with 0 Axes>

/home/dylan/anaconda3/lib/python3.7/site-packages/skimage/util/dtype.py:141: UserWarning:  
Possible precision loss when converting from float64 to uint16

.format(dtypeobj\_in, dtypeobj\_out))

```

==== pdhg
==== obj
==== breg
==== breg_x
==== breg_y
==== breg_erg
==== breg_ex
==== breg_ey
==== dist

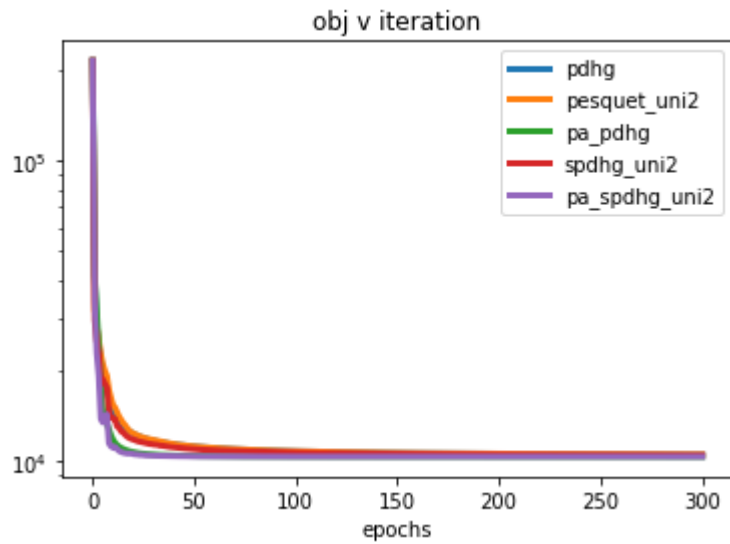
```

```
==== dist_x
==== dist_y
==== dist_erg
==== dist_ex
==== dist_ey
==== iter
==== obj_rel
==== pesquet_uni2
==== obj
==== breg
==== breg_x
==== breg_y
==== breg_erg
==== breg_ex
==== breg_ey
==== dist
==== dist_x
==== dist_y
==== dist_erg
==== dist_ex
==== dist_ey
==== iter
==== obj_rel
==== pa_pdhg
==== obj
==== breg
==== breg_x
==== breg_y
==== breg_erg
==== breg_ex
==== breg_ey
==== dist
==== dist_x
==== dist_y
==== dist_erg
==== dist_ex
==== dist_ey
==== iter
==== obj_rel
==== spdhg_uni2
==== obj
==== breg
==== breg_x
==== breg_y
==== breg_erg
==== breg_ex
==== breg_ey
==== dist
==== dist_x
==== dist_y
==== dist_erg
==== dist_ex
```

```

===== dist_ey
===== iter
===== obj_rel
===== pa_spdhg_uni2
===== obj
===== breg
===== breg_x
===== breg_y
===== breg_erg
===== breg_ex
===== breg_ey
===== dist
===== dist_x
===== dist_y
===== dist_erg
===== dist_ex
===== dist_ey
===== iter
===== obj_rel
===== linx === obj =====

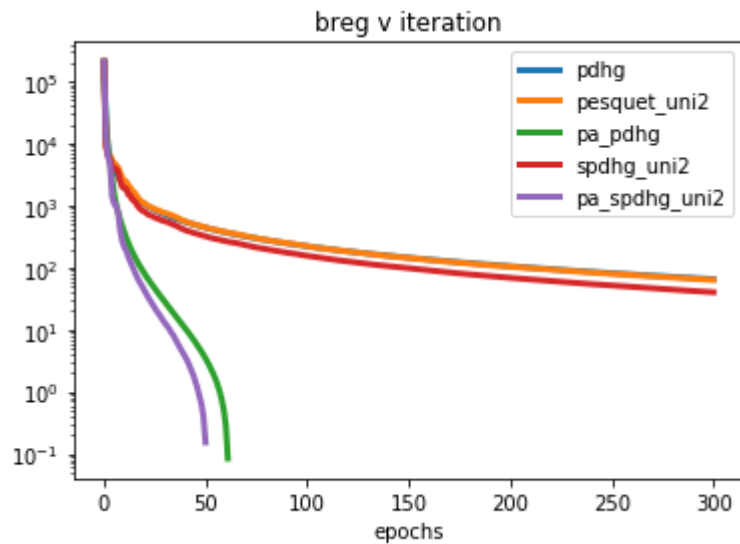
```



```

===== linx === breg =====

```

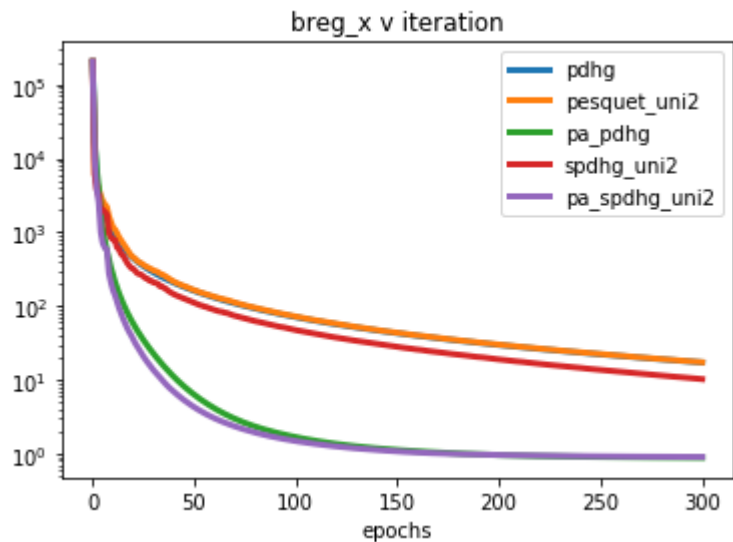


```

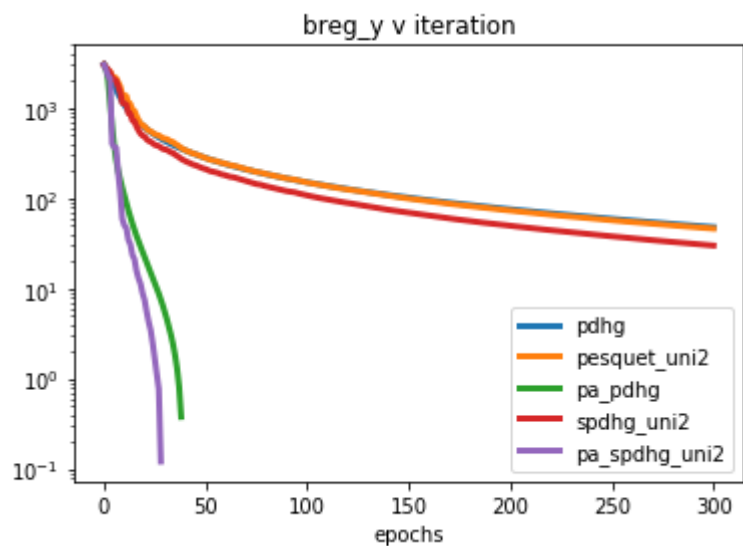
===== linx === breg_x =====

```

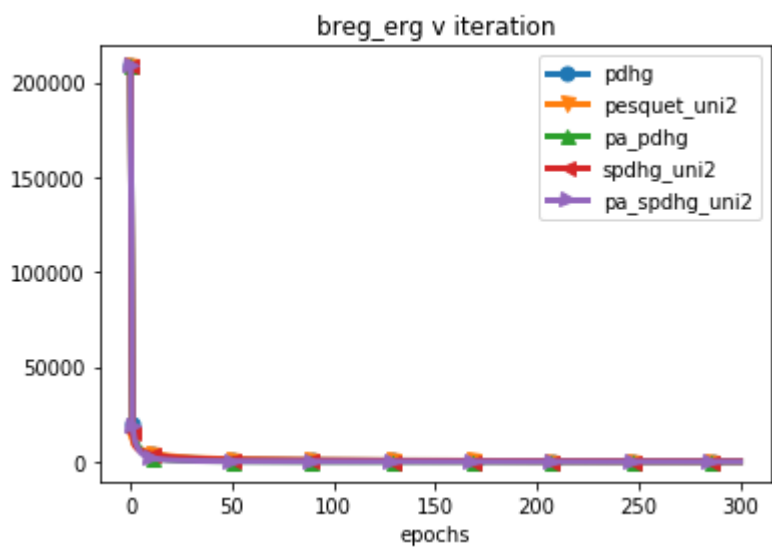




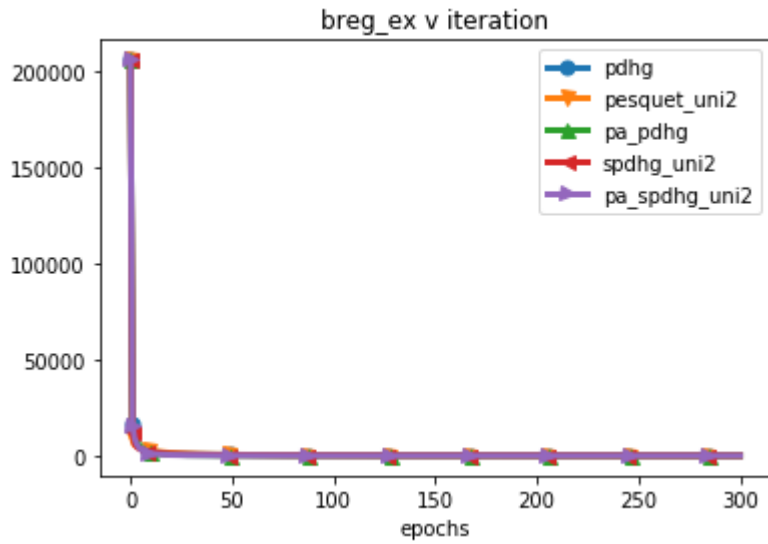
===== linx === breg\_y =====



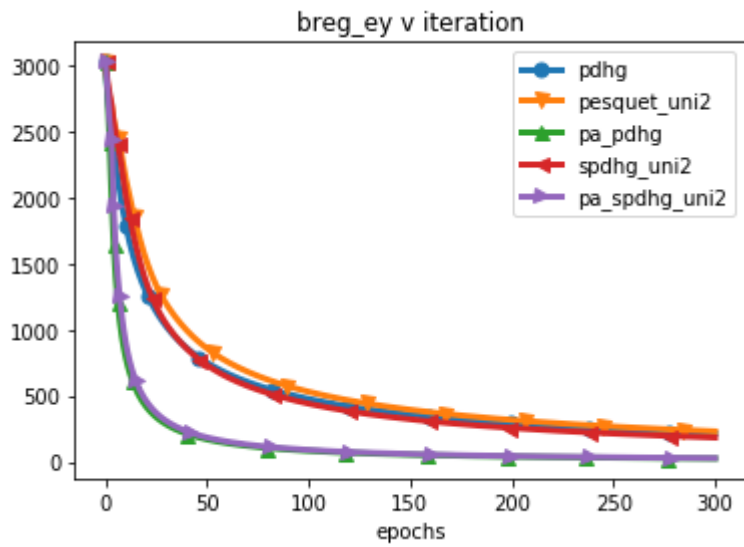
===== linx === breg\_erg =====



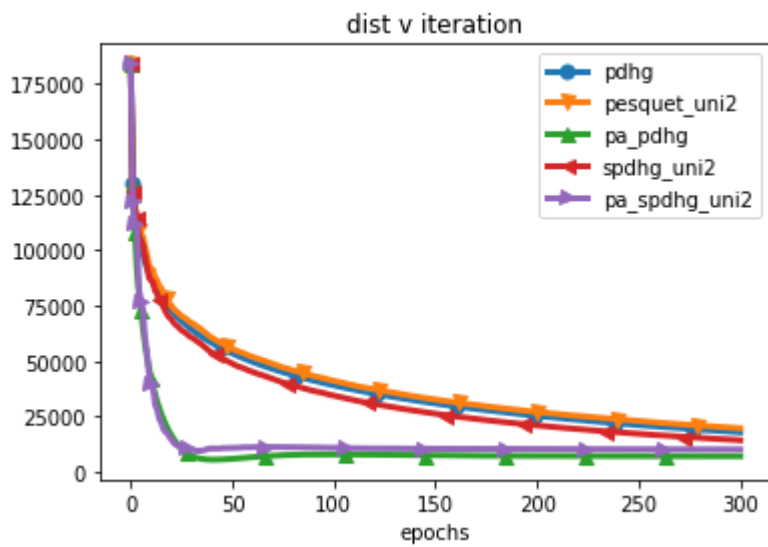
===== linx === breg\_ex =====



===== linx === breg\_ey =====

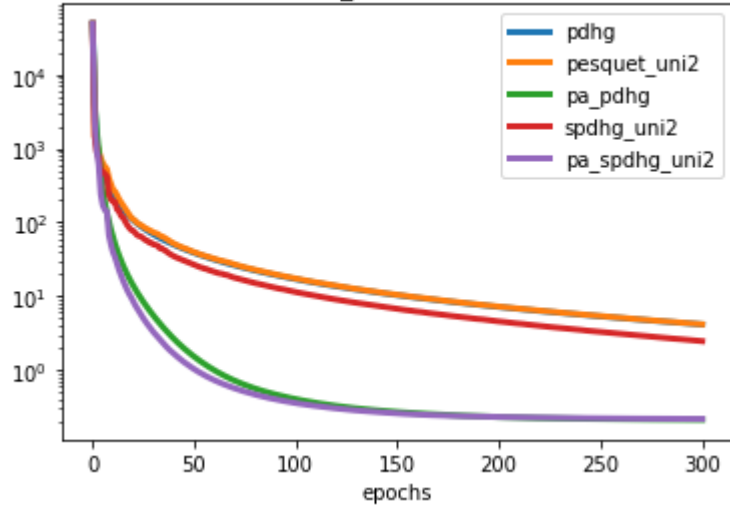


===== linx === dist =====



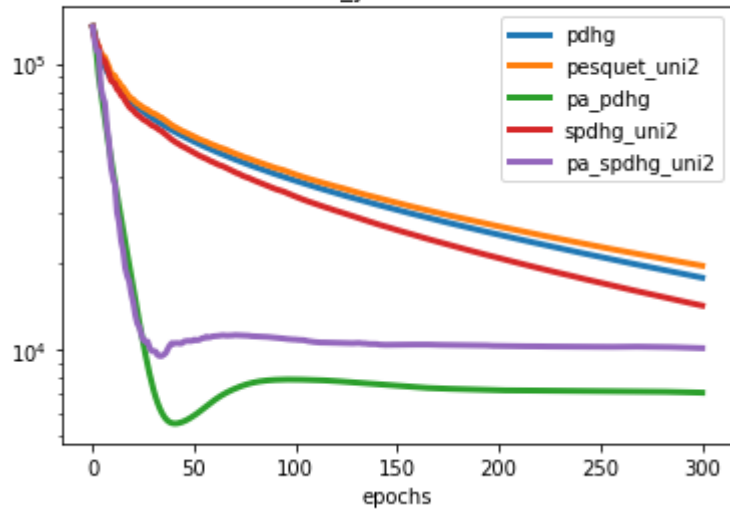
===== linx === dist\_x =====

dist\_x v iteration



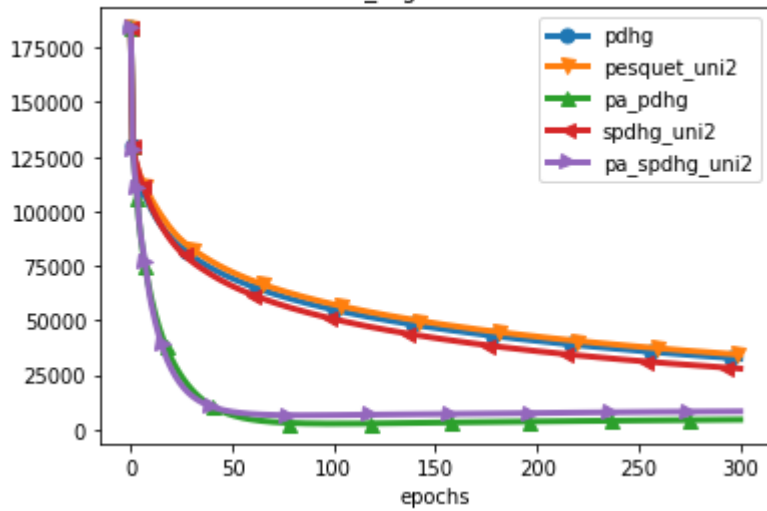
===== linx === dist\_y =====

dist\_y v iteration

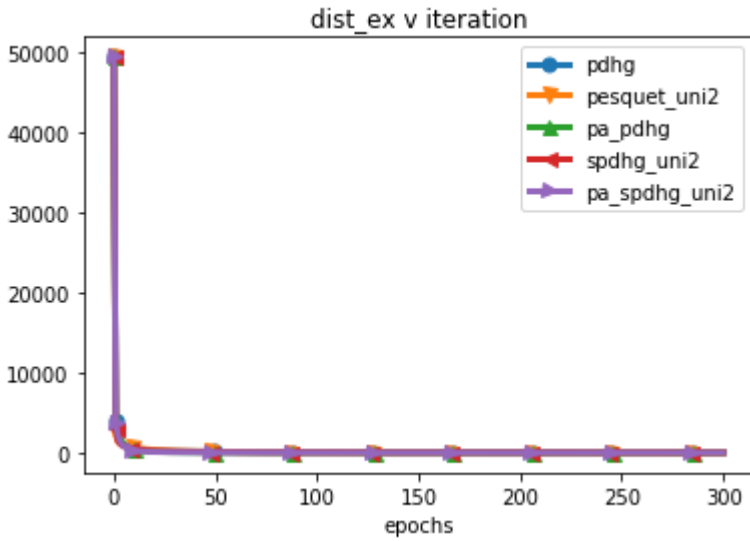


===== linx === dist\_erg =====

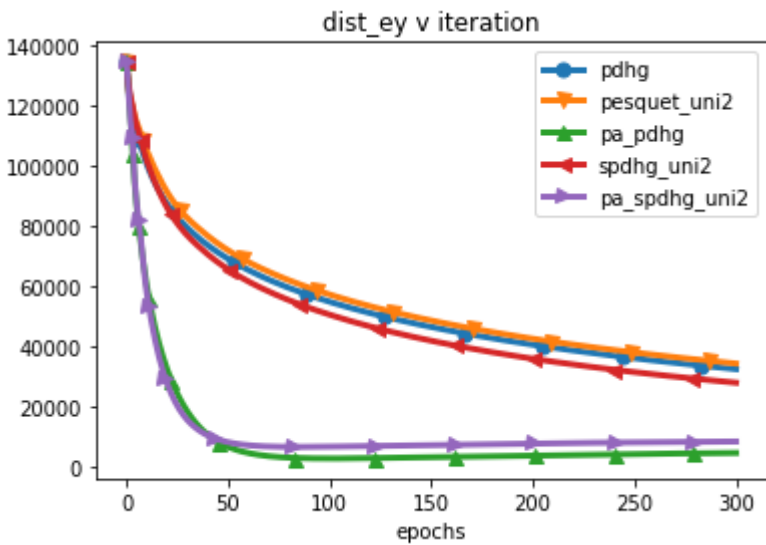
dist\_erg v iteration



===== linx === dist\_ex =====



===== linx === dist\_ey =====



===== linx === iter =====

Traceback (most recent call last):

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/IPython/core/formatters.py", line 341,
in _call_
    return printer(obj)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/IPython/core/pylabtools.py", line 244,
in <lambda>
    png_formatter.for_type(Figure, lambda fig: print_figure(fig, 'png', **kwargs))
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/IPython/core/pylabtools.py", line 128,
in print_figure
    fig.canvas.print_figure(bytes_io, **kw)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/backend_bases.py", line
2063, in print_figure
    **kwargs)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-
packages/matplotlib/backends/backend_agg.py", line 527, in print_png
    FigureCanvasAgg.draw(self)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-
packages/matplotlib/backends/backend_agg.py", line 388, in draw
    self.figure.draw(self.renderer)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/artist.py", line 38, in
draw_wrapper
    return draw(artist, renderer, *args, **kwargs)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/figure.py", line 1709, in
draw
    renderer, self, artists, self.suppressComposite)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/image.py", line 135, in
_draw_list_compositing_images
    a.draw(renderer)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/artist.py", line 38, in
draw_wrapper
    return draw(artist, renderer, *args, **kwargs)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/axes/_base.py", line 2647,
in draw
    mimage._draw_list_compositing_images(renderer, self, artists)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/image.py", line 135, in
_draw_list_compositing_images
    a.draw(renderer)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/artist.py", line 38, in
draw_wrapper
    return draw(artist, renderer, *args, **kwargs)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/lines.py", line 848, in draw
    affine, self.axes.transAxes)
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/lines.py", line 175, in
_mark_every_path
    marker_delta = np.arange(start * scale, delta[-1], step * scale)
```

**ValueError:** arange: cannot compute length

<Figure size 432x288 with 1 Axes>  
Traceback (most recent call last):

```
File "<ipython-input-13-3836e434fb30>", line 1, in <module>
    runfile('/home/dylan/文档/spdhg-master/example_rof.py', wdir='/home/dylan/文档/spdhg-
master')
```

```
File "/home/dylan/anaconda3/lib/python3.7/site-
packages/spyder_kernels/customize/spydercustomize.py", line 786, in runfile
    execfile(filename, namespace)
```

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/spyder_kernels/customize/spydercustomize.py"`, line 110, in `execfile`  
`exec(compile(f.read(), filename, 'exec'), namespace)`

File `"/home/dylan/文档/spdhg-master/example_rof.py"`, line 342, in `<module>`  
`bbox_inches='tight')`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/figure.py"`, line 2180, in `savefig`  
`self.canvas.print_figure(fname, **kwargs)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/backend_bases.py"`, line 2063, in `print_figure`  
`**kwargs)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/backends/backend_agg.py"`, line 527, in `print_png`  
`FigureCanvasAgg.draw(self)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/backends/backend_agg.py"`, line 388, in `draw`  
`self.figure.draw(self.renderer)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/artist.py"`, line 38, in `draw_wrapper`  
`return draw(artist, renderer, *args, **kwargs)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/figure.py"`, line 1709, in `draw`  
`renderer, self, artists, self.suppressComposite)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/image.py"`, line 135, in `_draw_list_compositing_images`  
`a.draw(renderer)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/artist.py"`, line 38, in `draw_wrapper`  
`return draw(artist, renderer, *args, **kwargs)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/axes/_base.py"`, line 2647, in `draw`  
`mimage._draw_list_compositing_images(renderer, self, artists)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/image.py"`, line 135, in `_draw_list_compositing_images`  
`a.draw(renderer)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/artist.py"`, line 38, in `draw_wrapper`  
`return draw(artist, renderer, *args, **kwargs)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/lines.py"`, line 848, in `draw`  
`affine, self.axes.transAxes)`

File `"/home/dylan/anaconda3/lib/python3.7/site-packages/matplotlib/lines.py"`, line 175, in  
`_mark_every_path`  
`marker_delta = np.arange(start * scale, delta[-1], step * scale)`

**ValueError:** arange: cannot compute length

In [14]:

In [14]:

In [14]: