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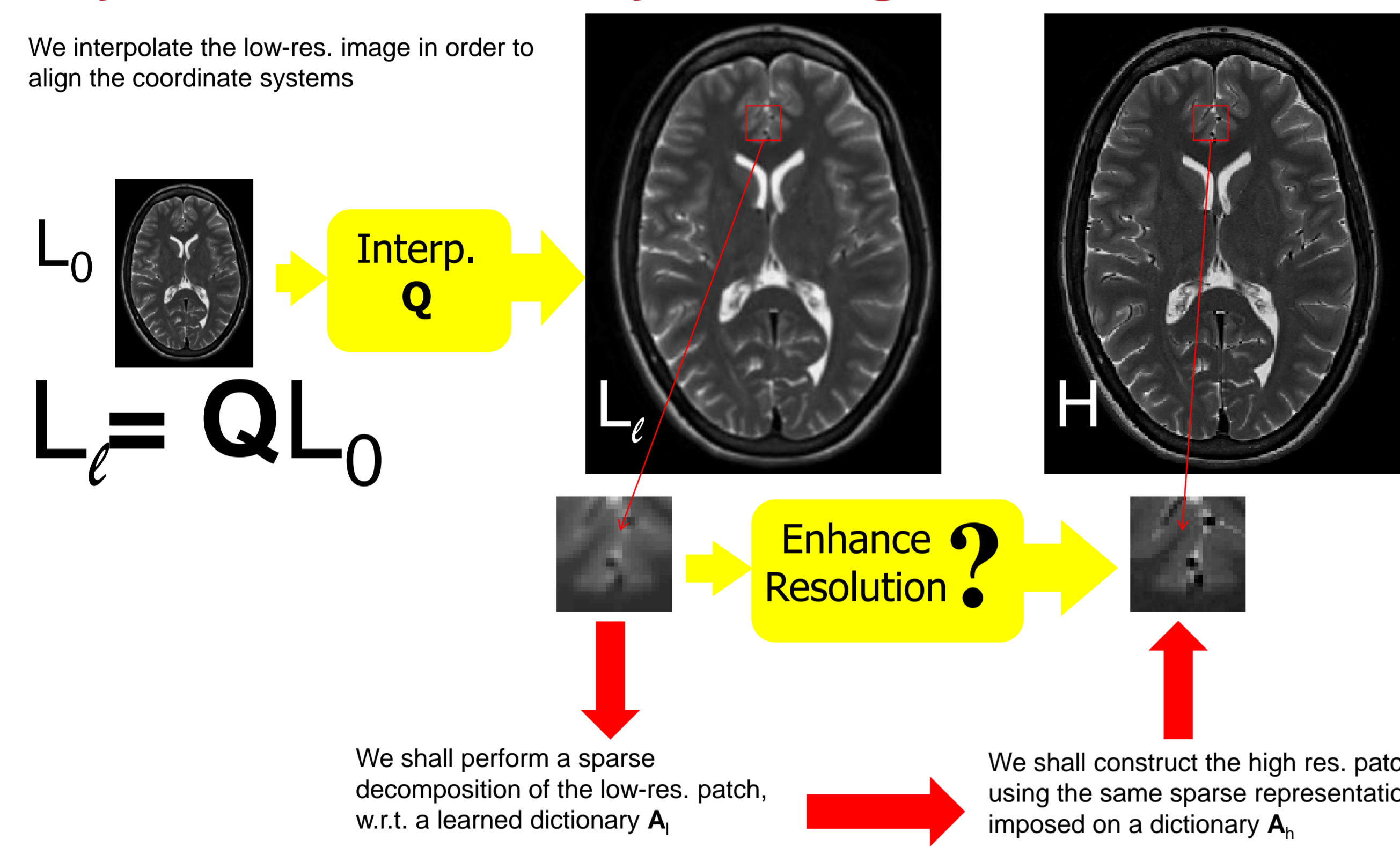
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2D single image super-resolution

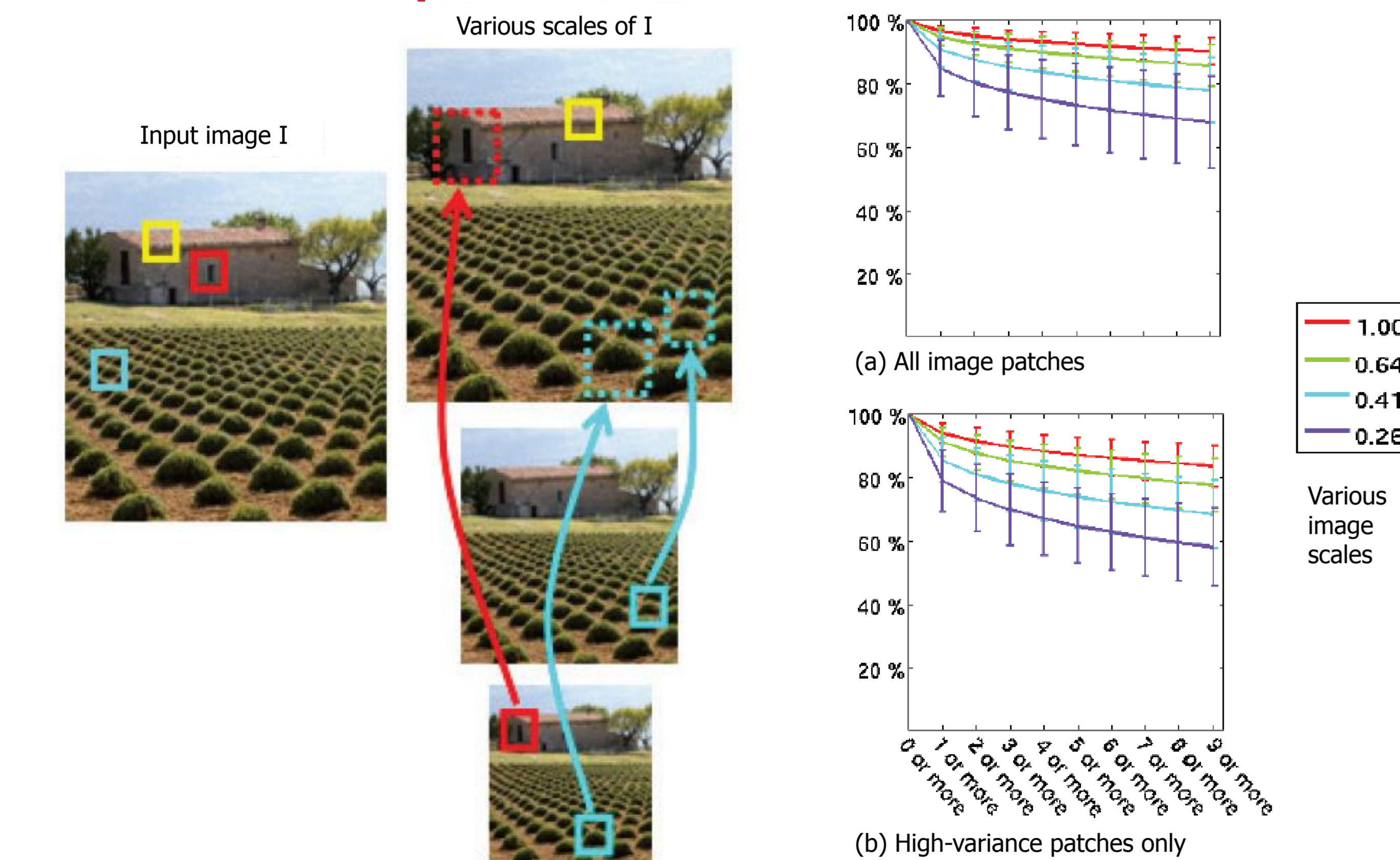
Introduction

Zeyde et al – dictionary learning

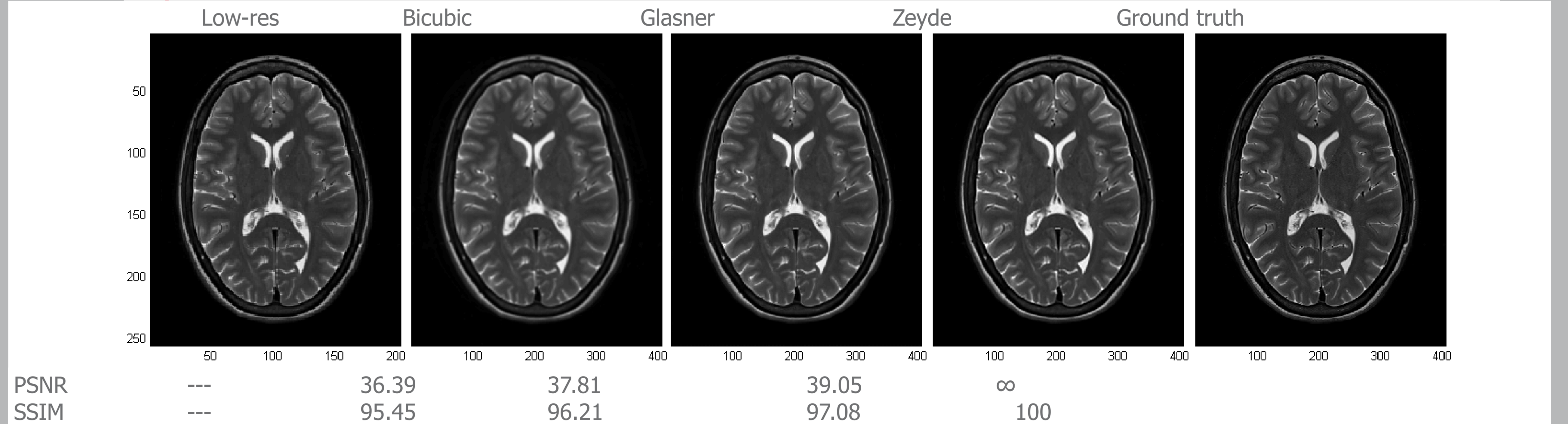
We interpolate the low-res. image in order to align the coordinate systems



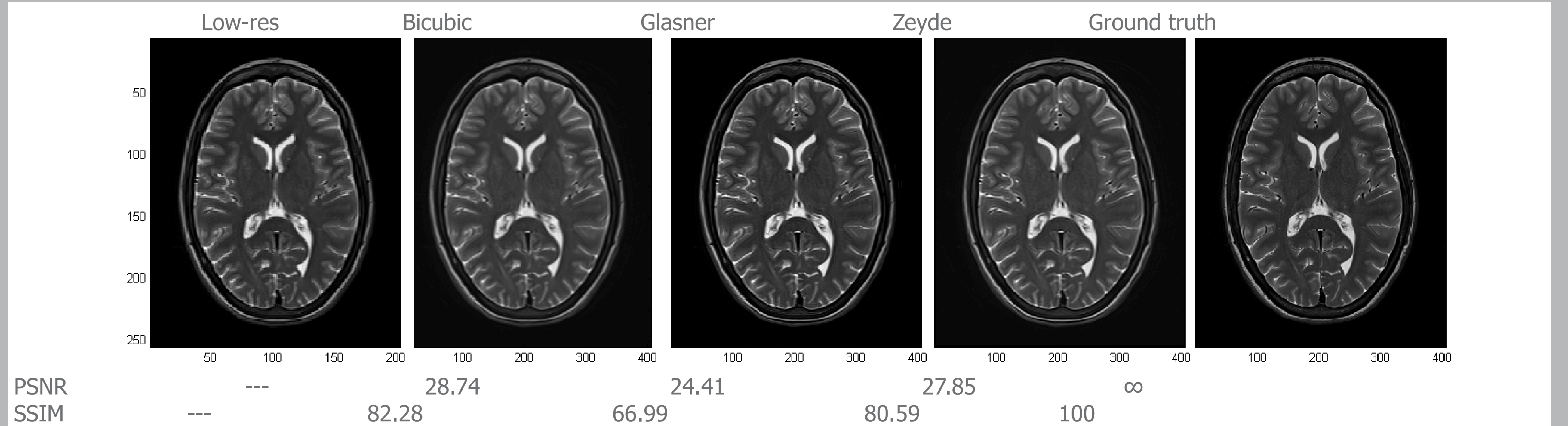
Glasner et al – patch recurrence



Results, Discussion & Conclusion



Artificial low-resolution image. The low-resolution (256 px) image L used for the reconstruction was generated by blurring and decimating the high-resolution image (512 px) H . H was retained as Ground truth for the reconstruction. All measures are in comparison to ground truth



Real low-resolution image. The low-resolution (256 px) image L used for the reconstruction was generated by the MRI scanner. All measures are in comparison to ground truth.

Discussion & Conclusion. From the image results we can conclude that input image matters. The artificial PSNR and SSIM measures outperforms the real. Especially Zeyde et al's method performs well in both cases – but is, however, beat by bicubic using the genuine low-resolution image. The reasons for bad results using real data might be: Movement in scanner combined with a more smooth bicubic image and the fact that the point spread function used is not suitable for modeling the MRI scanner.