<table>
<tr>
<td>cases</td>
<td>
<table>
<tr><th>doc_1</th><th>doc_2</th><th>decision</th><th>id</th></tr>
<tr>
<td>
<table>
<tr><th>authors</th><td>V. Gol'dshtein
A. Ukhlov</td></tr>
<tr><th>title</th><td>Universal conformal weights on Sobolev spaces</td></tr>
<tr><th>publication_date</th><td>2013-02-17 10:49:24+00:00</td></tr>
<tr><th>source</th><td>SupportedSources.ARXIV</td></tr>
<tr><th>journal</th><td>None</td></tr>
<tr><th>volume</th><td></td></tr>
<tr><th>doi</th><td></td></tr>
<tr><th>urls</th><td>http://arxiv.org/pdf/1302.4054v3
http://arxiv.org/abs/1302.4054v3
http://arxiv.org/pdf/1302.4054v3</td></tr>
<tr><th>id</th><td>id7615961242912841949</td></tr>
<tr><th>abstract</th><td>The Riemann Mapping Theorem states existence of a conformal homeomorphism φ of a simply connected plane domain $\Omega\subset\mathbb C$ with non-empty boundary onto the unit disc $\mathbb D\subset \mathbb C$. In the first part of the paper we study embeddings of Sobolev spaces $\overset{\circ}{W_{p}^{1}}(\Omega)$ into weighted Lebesgue spaces $L_{q}(\Omega,h)$ with an {}"universal" weight that is Jacobian of φ i.e. $h(z):=J(z,\varphi)=| \varphi'(z)|^2$. Weighted Lebesgue spaces with such weights depend only on a conformal structure of Ω. By this reason we call the weights $h(z)$ conformal weights. In the second part of the paper we prove compactness of embeddings of Sobolev spaces $\overset{\circ}{W_{2}^{1}}(\Omega)$ into $L_{q}(\Omega,h)$ for any $1\leq q<\infty$. With the help of Brennan's conjecture we extend these results to Sobolev spaces $\overset{\circ}{W_{p}^{1}}(\Omega)$. In this case q is not arbitrary and depends on p and the summability exponent for Brennan's conjecture. Applications to elliptic boundary value problems are demonstrated in the last part of the paper.</td></tr>
<tr><th>versions</th><td></td></tr>
</table>
</td>
<td>
<table>
<tr><th>authors</th><td>V.Gol'dshtein
A.Ukhlov</td></tr>
<tr><th>title</th><td>Universal conformal weights on Sobolev spaces</td></tr>
<tr><th>publication_date</th><td>2013-05-20 00:00:00</td></tr>
<tr><th>source</th><td>SupportedSources.INTERNET_ARCHIVE</td></tr>
<tr><th>journal</th><td></td></tr>
<tr><th>volume</th><td></td></tr>
<tr><th>doi</th><td></td></tr>
<tr><th>urls</th><td>https://archive.org/download/arxiv-1302.4054/1302.4054.pdf</td></tr>
<tr><th>id</th><td>id4904304854109298407</td></tr>
<tr><th>abstract</th><td>The Riemann Mapping Theorem states existence of a conformal homeomorphism Ï† of a simply connected plane domain Î©âŠ‚ C with non-empty boundary onto the unit disc DâŠ‚ C. In the first part of the paper we study embeddings of Sobolev spaces âˆ˜W_p^1(Î©) into weighted Lebesgue spaces L_q(Î©,h) with an "universal" weight that is Jacobian of Ï† i.e. h(z):=J(z,Ï†)=| Ï†'(z)|^2. Weighted Lebesgue spaces with such weights depend only on a conformal structure of Î©. By this reason we call the weights h(z) conformal weights. In the second part of the paper we prove compactness of embeddings of Sobolev spaces âˆ˜W_2^1(Î©) into L_q(Î©,h) for any 1â‰¤ q<âˆž. With the help of Brennan's conjecture we extend these results to Sobolev spaces âˆ˜W_p^1(Î©). In this case q is not arbitrary and depends on p and the summability exponent for Brennan's conjecture. Applications to elliptic boundary value problems are demonstrated in the last part of the paper.</td></tr>
<tr><th>versions</th><td></td></tr>
</table>
</td>
<td>DUPLICATES</td>
<td>1311</td>
</tr>
</table>
</td>
</tr>
</table>