Number of Ionized Dopants vs doping density for Ge at T = 300K 1.2  $N_A - /N_A$  Ge  $N_T^-/N_T$  Ge 1.0 8.0 0.6 0.4 Ge Parameter: € 0.66 eV 0.2 0.0 10<sup>16</sup> 10<sup>24</sup> 10<sup>18</sup> 10<sup>20</sup> 10<sup>22</sup>

doping density / m<sup>-3</sup>